



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** May 5, 2015

**TO:** Mayor and Councilmembers

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

**SUBJECT:** Declaration Of Stage Three Drought Emergency And Adoption Of Stage Three Water Use Regulations And Development Restrictions

### RECOMMENDATION:

That Council adopt, by reading of title only, A Resolution of the Council of the City of Santa Barbara Declaring a Stage Three Drought Emergency and Establishing Water Use Regulations and Development Restrictions to Be Effective During a Stage Three Drought Emergency.

### DISCUSSION:

For over a year, the City has been taking successive steps in response to what has turned out to be the worst dry period on record in Santa Barbara, with 2015 being the end of the driest four years on record. These steps have been in line with the City's Water Shortage Contingency Plan and the 2011 Long-Term Water Supply Plan, which are based on the following principles:

- Most of the City's water supplies depend on rainfall to fill reservoirs;
- Severe drought is an expected part of water supply planning and develops over a number of years, as our primary water supplies diminish;
- A drought might end in a relatively short time, but the lead time needed to ensure an adequate supply of water requires an assumption of continuing drought; and
- Management of customer demand is a critical part of water supply management, including ongoing efficiency improvements during normal times and extraordinary additional cutbacks during extended dry periods.

On February 11, 2014, Council declared a Stage One Drought Condition at the midpoint of a possible third consecutive dry year. On May 20, 2014, with no improvement in water supply during the last half of the rainy season, Council adopted a Stage Two Drought Condition, triggering the following actions:

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- Expanded public information efforts to publicize the drought status and the need for extraordinary conservation efforts;
- Established a 20 percent water conservation target for City customers, based on statewide drought conditions and record low rainfall;
- Enacted Stage Two water use regulations;
- Adopted drought water rates, based on the added costs of water supplies and necessary water use reductions;
- Purchased supplemental water to offset depleted surface water supplies; and
- Initiated preliminary design and solicitation of Design/Build/Operate proposals for the reactivation of the City's Charles Meyer Desalination Facility (Desalination Facility).

The above actions were in response to a third dry year. The rainy season of the fourth year has again provided less than half of average rainfall. Gibraltar Reservoir is essentially empty, the 2016 State Water Project allocation is expected to be no more than 20 percent, and, for the first time in history, no water entitlements from Lake Cachuma are anticipated for 2016. Accordingly, staff recommends adoption of a Stage Three Drought Emergency, to be implemented in a phased approach, as discussed below. New actions would be related to the community water conservation target, water use regulations, and development restrictions. The recommended actions reflect preliminary Council review and input on April 14, 2015, and ongoing discussions with the City's Board of Water Commissioners. The actions are part of the City's overall drought response that also includes an upcoming staff recommendation to award a contract for the reactivation and operation of the Desalination Facility and implementation of Fiscal Year 2016 Drought Water Rates.

#### **Water Conservation Target**

Since the declaration of a Stage One Drought Condition, the City has asked the community for a 20 percent reduction in water usage to help stretch available supplies. As in past droughts, the community has responded by meeting the goal, with cumulative water reductions in excess of 20 percent, since the Stage Two Drought rates took effect in July 2014. At this time, a water conservation target of 25 percent is recommended to further stretch remaining supplies while minimizing impacts to the local economy and damage to valuable community landscape resources. While the analysis of rates adopted by Council on April 7, 2015 does not include a change to a 25 percent reduction, the rates do reflect the cost of reactivating the Desalination Facility and will contribute to meeting the target, in conjunction with new water use regulations, development restrictions, and the City's public information campaign. The 25 percent target matches the mandatory statewide target, established in an April 1, 2015 Executive Order by Governor Brown, though City staff developed this recommendation prior to the Governor's Executive Order.

At the time this report was prepared, the State Water Resources Control Board (State Board) had issued draft regulations to implement the Governor's mandatory reductions. Consistent with the Governor's Executive Order, the reduction targets vary from 8 to 36

percent, depending on each urban water supplier's residential per capita daily usage during July through September of 2014. If adopted by the State Board, this approach would set a 16 percent mandatory reduction for the City of Santa Barbara. However, staff still recommends a 25 percent water conservation target based on the City's particular circumstances.

### **Water Use Regulations**

In July 2014, the State Board adopted statewide water use regulations that were generally consistent with the Stage Two regulations adopted by the City in May 2014. On April 28, 2015, the State Board published updated draft regulations to implement rules that were called for in the Governor's Executive Order. These updated regulations are also consistent with the City's current and planned regulations, with minor exceptions. The State's updated regulations are scheduled to be adopted by the State Board on or about May 5, 2015.

Given the success of the community in meeting the water conservation target to date, staff is recommending limited additional regulations at this time, mostly for clarification of current Stage Two regulations, and changes as needed to comply with State mandates. The attached "Summary of Recommended Stage Three Drought Response Measures" presents the recommended regulations grouped as new, modified, and existing. As discussed with Council on April 14, 2015, staff has identified additional regulations that can be enacted, if the conservation target is not met. These regulations would be related to mandating the use of high-efficiency irrigation systems and limiting or prohibiting irrigation of turf.

### **Development Restrictions**

Potential development restrictions were discussed with Council in October and December 2014, and in detail on April 14, 2015. Staff consulted with the Planning Commission on February 12, 2015 regarding appropriate development restrictions that would accompany a Stage Three Drought Emergency declaration, and has evaluated the relative costs of administering various restrictions along with the associated water savings benefits. Based on that evaluation and Council input, staff is recommending the following initial development restrictions during Stage Three:

- Suspension on the issuance of building permits for new swimming pools;
- Enforcement of the Governor's Executive Order restricting irrigation for new buildings;
- Mandatory deferral of the installation of non-water wise plants, including turf; and
- Voluntary landscape deferral.

In a separate recommendation on this agenda, staff is also recommending introduction of an ordinance that would prohibit private water well construction on properties served by the City's water system.

As with water use regulations, additional potential development restrictions have been identified for future implementation, if needed, including a mandatory landscaping deferral, suspension of permits for projects with net new water use, and suspension of new water meter installations.

### **Conclusion**

Staff believes the recommended measures are appropriate, given the community's success in meeting the established water conservation targets. Staff plans to monitor the cumulative water savings from June through September 2015, as a basis for determining whether to recommend additional measures for Council consideration in October 2015. These may include additional water use regulations and/or development restrictions.

**ATTACHMENT:** Summary of Recommended Stage Three Drought Response Measures

**PREPARED BY:** Joshua Haggmark, Water Resources Manager/BF/mh  
Allison DeBusk, Acting Senior Planner

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

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

## Summary of Recommended Stage Three Drought Response Measures

### New:

- Irrigation with potable water during and within 48 hours after measurable rainfall is prohibited. Measurable rainfall is defined as a ¼ of an inch or more of precipitation in a 24-hour period.
- Irrigation with potable water of turf on public street medians is prohibited.
- For the protection of public health and safety, the following drought-related development restrictions are hereby established and shall remain in effect for the duration of the Stage Three Drought Emergency, unless repealed or modified by resolution of the City Council:
  - a. No building permits for the installation of new pools shall be issued. Spas of less than 500 gallons are not subject to this moratorium.
  - b. Irrigation with potable water of landscapes outside of newly constructed homes and buildings is prohibited unless delivered by drip or micro-spray systems and accomplished in a manner consistent with regulations or other requirements established by the California Building Standards Commission.
  - c. For projects with new required landscaping included as part of the building permit, any new plants that are not water wise (as identified on the approved landscape plan) shall not be installed.
  - d. If desired, projects with required landscape plans may voluntarily defer the installation of landscape plantings that are not 1) required for compliance with an approved Storm Water Management Plan, environmental mitigation measures, or a creek or habitat restoration plan; 2) required for erosion control or to address a landslide threat; or 3) relocated trees or shrubs.
  - e. Exemptions:
    - i. Projects that submitted an application to the Planning Division or Building & Safety Division prior to declaration of the Stage Three Drought Emergency are exempt from item a above.
    - ii. Projects that submitted an application for a building permit prior to declaration of the Stage Three Drought Emergency are exempt from items b and c above.
    - iii. Landscaping irrigated exclusively with non-potable water is exempt from items b and c above.
    - iv. Exemptions to the development restrictions identified above may be granted by the Community Development Director, in consultation with the Public Works Director, for specific uses of water on the basis of factually demonstrated need or undue hardship and in accordance with guidelines for exemptions as may be determined by the Community Development Director. If the Community Development Director denies a request for an exemption for a specific water use, a written request for reconsideration may be made to the Planning Commission. The decision of the Planning Commission shall be final.
  - f. Administrative Guidelines for implementation of items c through e shall be prepared by the Community Development Director.

### Modified:

- The outdoor use of potable water from a hose, pipe, or faucet for the purpose of cleaning buildings, pavement, driveways, sidewalks, tile, wood, plastic, or other hard surfaces is prohibited.
 

Exceptions: The following exceptions are allowed, provided that potable water is applied only by use of a pressure washer, mop, bucket, brush, and/or other tools to limit the use of running water to the minimum necessary. A pressure washer is defined herein to be equipment that boosts incoming water pressure for the purpose of enhancing cleaning capability and minimizing the amount of water used:

  - i. Such use is allowed when it is the only feasible means of correcting an immediate threat to

- health and safety.
  - ii. Such use is allowed as a part of preparation for painting or sealing, provided that such washing occurs immediately prior to such painting or sealing.
  - iii. Such use is allowed for the following purposes, with prior notification to the City's Water Conservation Hotline, for a specific location, and subject to the specified limitations:
    1. Washing of awnings, windows, solar panels, signs, and other items, where necessary for preventive maintenance, not more than once in any three-month period;
    2. Washing of building surfaces, not more than once in any twelve-month period.
  - iv. Such use is allowed for dust control, including as a part of street sweeping operations, provided the use of water is the minimum necessary to accomplish the intended control of dust.
- Outdoor irrigation of any grass, shrub, plant, tree, groundcover, or other vegetation by use of an automatically controlled irrigation system is allowed only between the hours of 6:00 p.m. and 8:00 a.m. If manually operated, such irrigation is allowed only between the hours of 4:00 p.m. and 10:30 a.m. Irrigation by hand-held hose is subject to the self-closing valve provision of Section 2.a.
 

Exceptions:

    - i. Irrigation accomplished by use of a water truck that delivers water by injection probe below mulch or below the soil surface is exempt from such scheduling limitations.
    - ii. Irrigation devices such as tree watering bags and other similar devices that release water at a slow rate for the purpose of watering trees are exempt from such scheduling limitations.
  - Irrigation with potable water that causes runoff onto adjacent property, non-irrigated areas, private and public walkways, roadways, parking lots, or parking structures is prohibited.
  - Vehicles and boats shall be washed only at commercial car washing facilities equipped with water recycling equipment or by use of a hose, subject to the self-closing valve provision of Section 2.a. Operators of commercial car washing facilities shall post a notice in a conspicuous place advising the public as to whether their operations conform to such requirements. Commercial auto dealerships shall limit the regular washing of "fleet" or inventory vehicles to no more than once per week per vehicle and shall use a pressure washer. Vehicle "point-of-sale" washing is permitted. Dealerships shall post, in a conspicuous place, a Notice of Drought Condition, as approved by the Public Works Director, as well as signage informing customers that service vehicle washing is upon request only, and shall refrain from washing cars during service visits, except upon specific request by a customer.
  - No use of water shall be allowed in any fountain or other decorative water feature that is not equipped with a recirculation system. The use of water in ornamental water features and fountains is prohibited except that such prohibition shall not apply to ornamental water features and fountains that:
    - i. Are located indoors ; or on residential properties
    - ii. Have a total water surface area less than or equal to twenty five square feet; or
    - iii. As of the adoption date of this resolution, are home to aquatic life, provided that water shall be used and circulated only to the extent needed to maintain suitable living conditions for such aquatic life.
  - All restaurants and other eating and drinking establishments shall post, in a conspicuous place, a Notice of Drought Condition as approved by the Public Works Director and shall refrain from serving water except upon specific request by a customer.
  - Operators of hotels, motels and other commercial establishments offering lodging shall post in each room a Notice of Drought Condition as approved by the Public Works Director. Operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. The hotel or motel shall prominently display notice of this option in each guestroom using clear and easily understood

language.

## Existing:

- Any outdoor use of potable water through a hose or outdoor faucet not otherwise addressed by these regulations is prohibited unless the water is delivered by use of a self-closing valve that requires operator pressure to activate the flow of water. Use of a sprinkler device attached to a movable hose is allowed, subject to applicable restrictions on time of irrigation and prohibition of runoff.
- Swimming pools and spas shall have a cover that conforms to the size and shape of the pool or spa and acts as an effective barrier to evaporation. The cover shall be in place during periods when use of the pool is not reasonably expected to occur.
- Draining and refilling up to one third of the volume of a pool per year is allowed as necessary to maintain suitable pool water quality. Draining and refilling in excess of such one third per year is prohibited, except as authorized by the Public Works Director based on evidence from qualified maintenance personnel that such further draining is required to make needed repairs, or to prevent equipment damage or voiding of warranties.
- Operators of pools, exercise facilities, and other similar commercial establishments providing showering facilities shall promote limitation of showering time and post a Notice of Drought Condition as approved by the Public Works Director in a conspicuous place.



# Stage Three Drought Declaration

City Council  
May 5, 2015



# Outline

- ◆ Drought Condition Recap
- ◆ Status of City Water Supplies
- ◆ Stage Three Water Use Regulations
- ◆ Stage Three Development Restrictions
- ◆ Recommendation



# Drought Condition Recap

- ◆ Jan 2014: State Drought Emergency - Gov. Brown asked for 20% reduction in water use
- ◆ Feb 2014: City of Santa Barbara declared Stage One Drought Condition
- ◆ May 2014: City of Santa Barbara declared Stage Two Drought Condition
- ◆ April 2015: Governor Brown and State Board released statewide emergency regulations



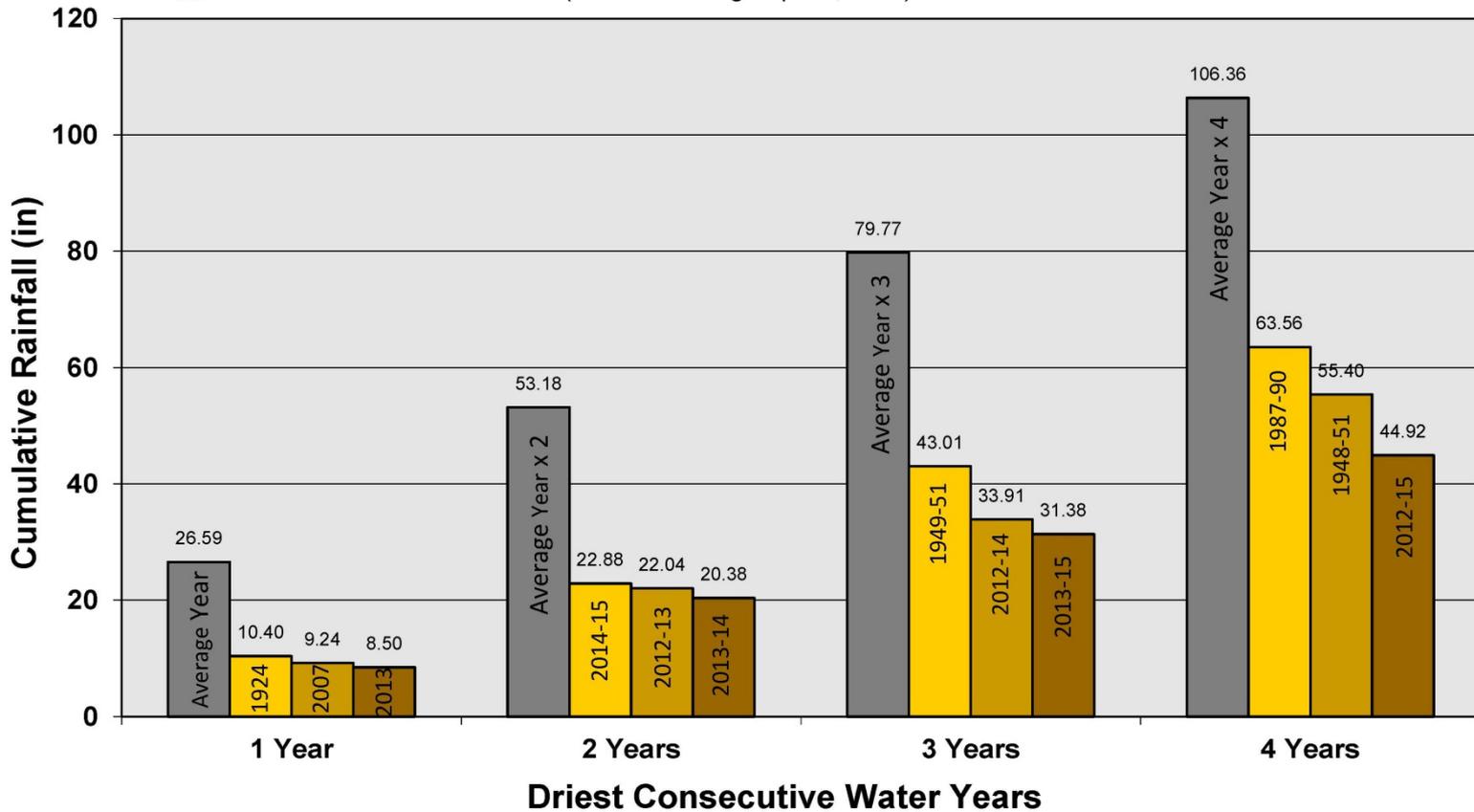
# Water Supply Outlook

- ◆ The combined rainfall from the last 4 years at Gibraltar are the driest on record, by 20%
- ◆ No significant measureable rain anticipated until next winter
- ◆ Rainfall Totals for the water year as of 5/1/15:
  - Gibraltar Lake – 11.39” (44% of Normal)
  - Lake Cachuma – 8.50” (44% of Normal)
  - Santa Barbara – 9.41” (53% of Normal)

# Driest 4 Years on Record



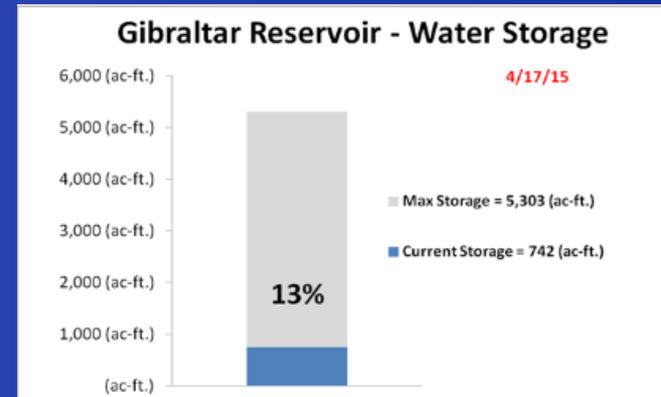
## Driest Consecutive Years - Gibraltar 96 Years of Rainfall (1920-2015) (WY2015 through April 1, 2015)



# Surface Water Supplies

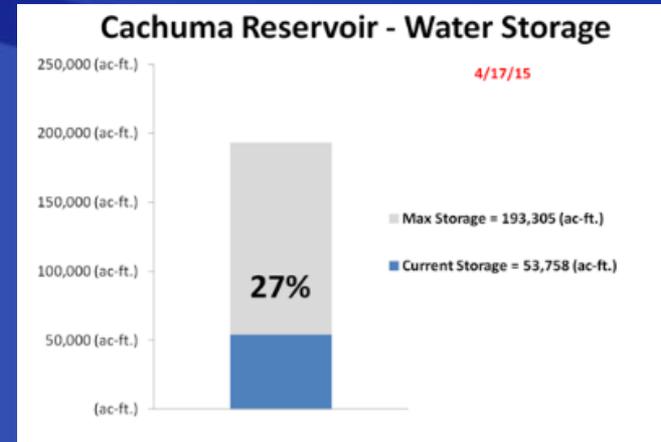
## ◆ Gibraltar Reservoir

- 13% of Capacity with ~ 700 AF



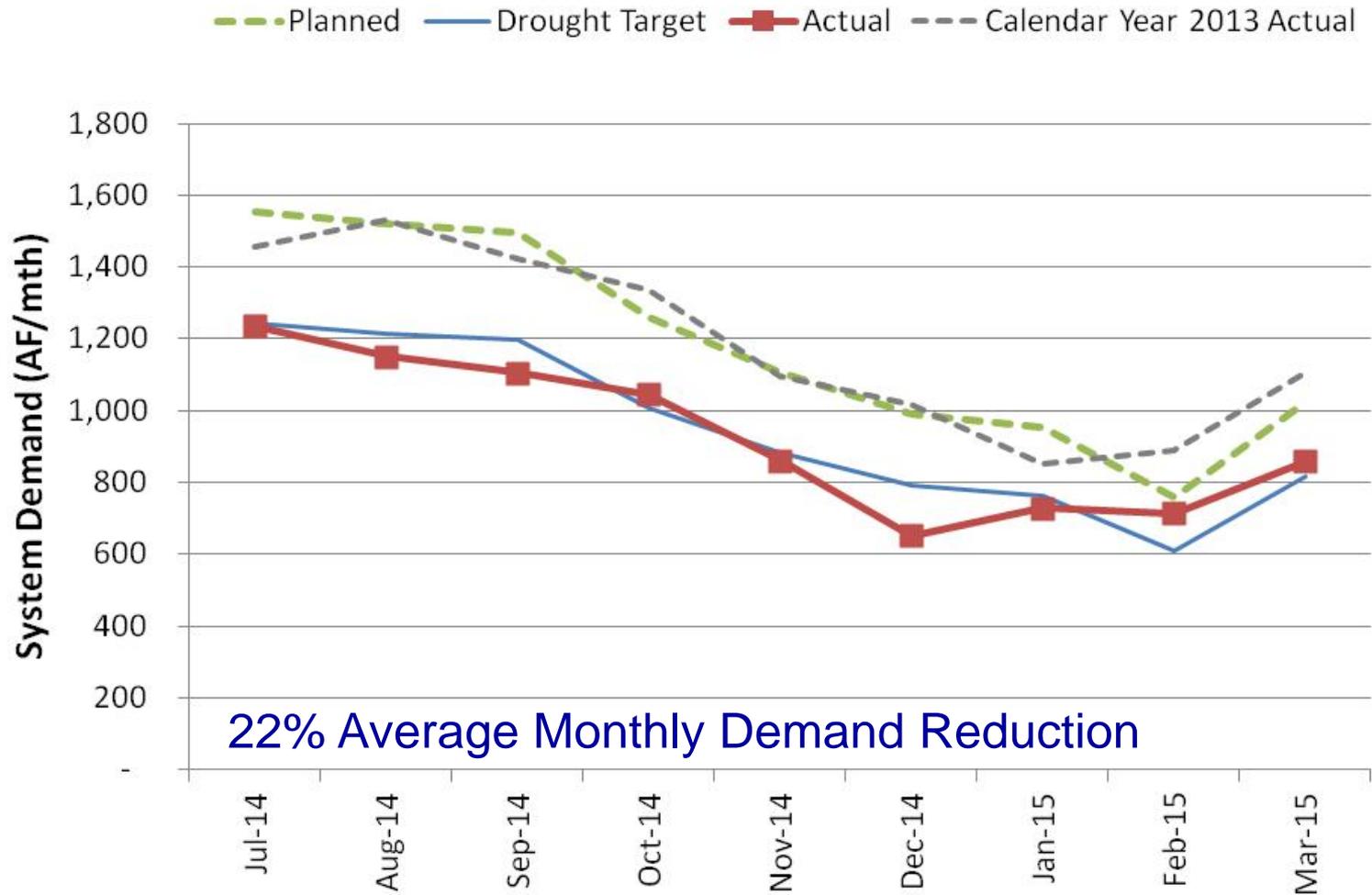
## ◆ Lake Cachuma

- 27% of Capacity with ~ 53,000 AF



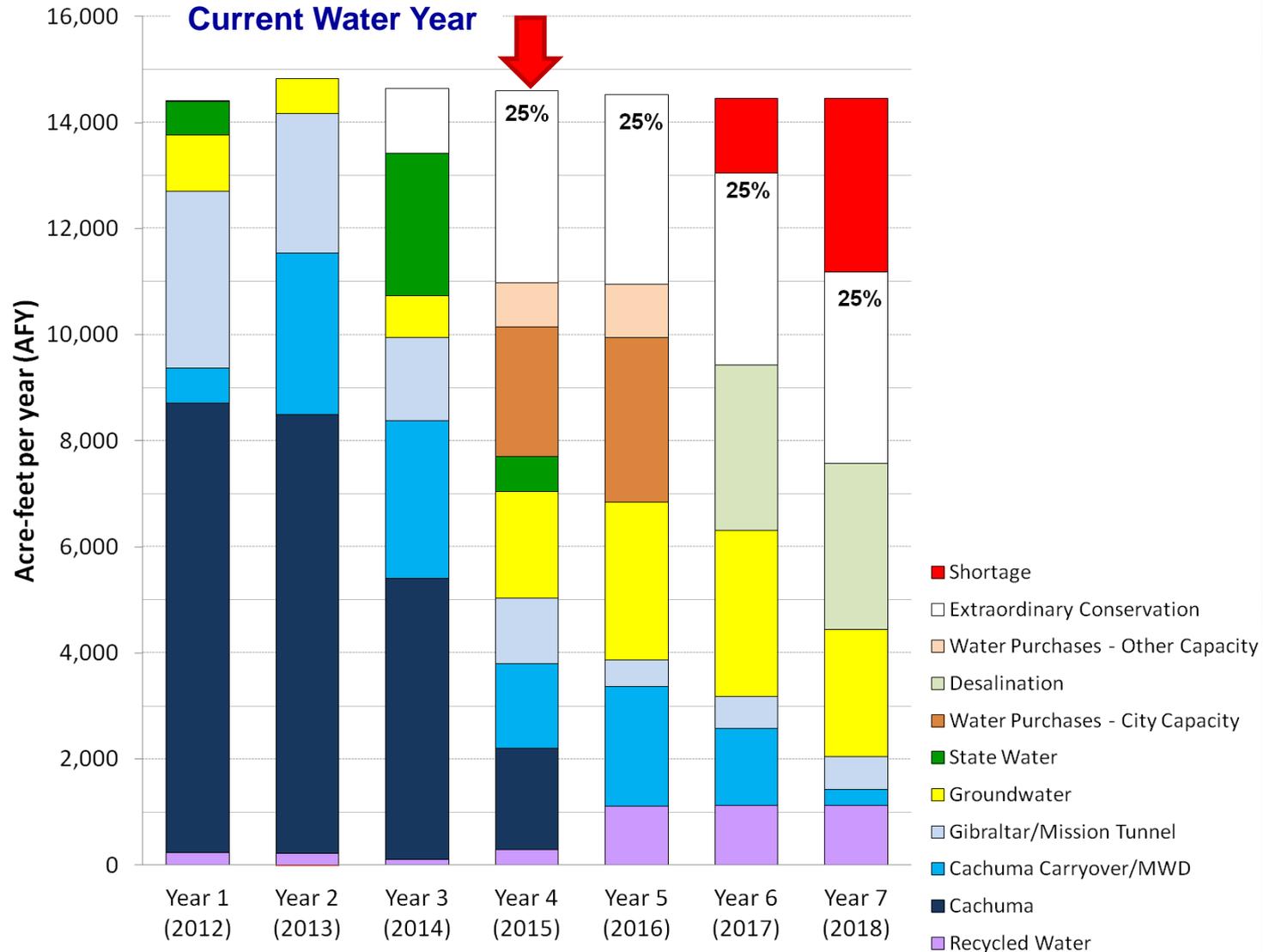
# Water Conservation

Fiscal Year 2015



# Proposed Supply Strategy

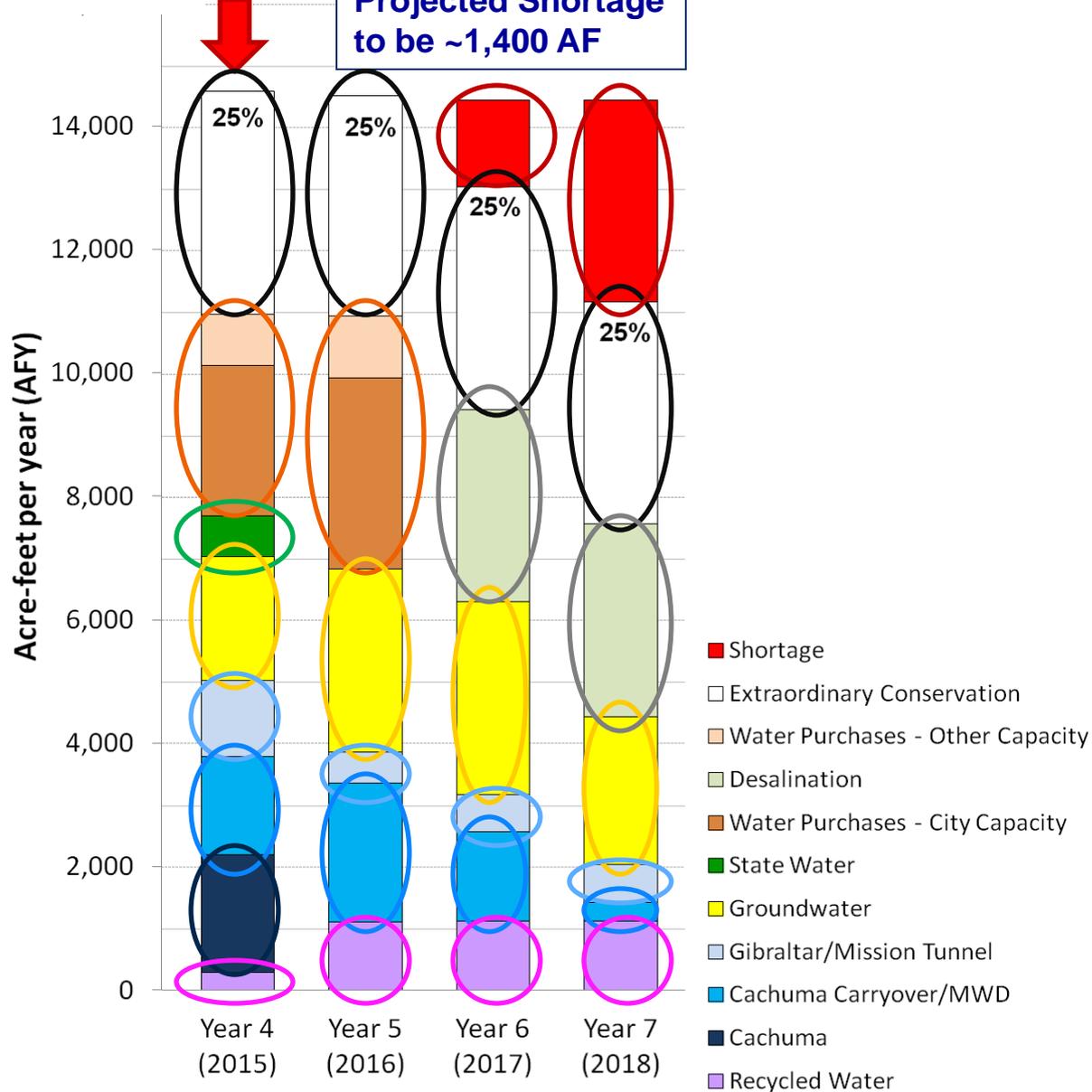
(based on no reservoir inflows, no State Water)



# Proposed Supply Strategy

Current Water Year

Projected Shortage to be ~1,400 AF





# Water Conservation Target

- ◆ Recommend a goal of 25% for Stage 3
- ◆ Revenue impacts estimated to be ~\$5M
- ◆ Adopted rates did not include a change in conservation target
- ◆ Plan to bring revenue impacts back for discussion with Desalination Project in June

# Statewide Water Use Regulations

- ◆ Gov. Brown issued an executive order on April 1, 2015.
- ◆ Modified regulations proposed by the State Board on April 28, 2015
  - New conservation standard for the City is 16%
  - Regulations expected to be adopted May 5 or 6



# Proposed Water Use Regulations

- ◆ New Regulations:
  - No potable watering during and within 48 hours after measurable rainfall
  - No potable watering of turf in public street medians





# Proposed Water Use Regulations

## ◆ Modified Regulations:

- Hotels and motels must display options of having towels and linens laundered in each guest room.
- Prohibit operating fountains in excess of 25 ft<sup>2</sup> of water surface area on residential properties
- Specifications for frequency of pressure washing for preventative maintenance:
  - Awnings, windows, solar panels, etc. – once every three months
  - Building surfaces – once every 12 months

# Proposed Water Use Regulations

## ◆ Modified Regulations:

- Runoff onto private walkways, parking lots, or parking structures is prohibited.
- Commercial car dealerships must limit washing inventory vehicles to no more than once per week with a pressure washer. Service visit cars must only be washed upon request by a customer.





# Proposed Water Use Regulations

## ◆ Existing Regulations:

- Hoses must be equipped with an automatic shut-off nozzle.
- Automatic irrigation is prohibited between 8:00 am and 6:00 pm, manual irrigation is prohibited between 10:30 am and 4:00 pm.
- Swimming pools and spas must be covered when not in use, no draining and refilling by more than 1/3 of pool volume.



# Proposed Development Restrictions

- Suspension of building permits for new swimming pools (for pools not already in the review process)
- Irrigation of landscapes outside new homes and buildings must only be drip or microspray systems
- For projects with required new landscaping, mandatory deferral of the installation of any new plants that are not water wise (e.g. turf)
- Voluntary deferral of other “aesthetic” landscaping



# Summary

- ◆ Our water supply situation has not improved
- ◆ A water shortage is projected for next year
- ◆ Unprecedented drought conditions
- ◆ Working to secure & preserve water supplies & promote extraordinary water conservation
- ◆ Increased citywide demand reduction target to 25%

# Recommendation

- ◆ Adopt a Resolution Declaring a Stage Three Drought Condition and Establishing Water Use Regulations and Development Restrictions





**For information & assistance on  
water conservation:**

**[www.SantaBarbaraCA.gov/WaterWise](http://www.SantaBarbaraCA.gov/WaterWise)**

**Call: 564-5460**



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# Backup Slides

# Water Use for New Pools

## ◆ CPSA assumptions:

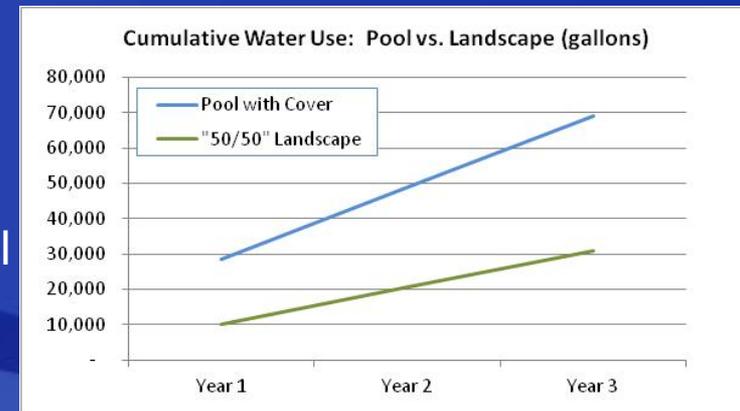
- 70% evaporation reduction with pool cover
- Water use for backwash and salt control apparently not included

## ◆ Staff analysis:

- 45% evaporation reduction with pool cover (30% to 60% cited by CUWCC)
- Includes water for backwashing & salt control
- Landscape type: 50% turf & 50% water wise plants
- 25% irrigation reduction per current drought condition

## ◆ Net 3-Year Water Supply Impacts from New Pools

- Average new pools/year: 14
- Net added annual demand: 1.2 AFY
- Net increase in water use over 3 years: 3.5 AF





# Enforcement Approach

- ◆ Current enforcement is complaint-driven
  - Over 1,000 calls/reports
  - 10 Notices of Violation
  - 0 fines
- ◆ Staff recommends continuing with complaint-driven enforcement as long as conservation target is met