



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: November 1, 2016

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Stage Three Drought Update And Continuation Of Discussion On Additional Water Use Regulations

RECOMMENDATION: That Council:

- A. Receive an update on the status of the current drought, projected supply shortages, and continue the discussion on additional water use regulations;
- B. Authorize the Public Works Director to amend Professional Services Contract No. 21700032, with Katz and Associates, Inc., for public outreach on water supply and drought issues, increasing the original contract by \$52,294 for a total not to exceed of \$85,389, which includes \$4,754 in extra services of Katz and Associates, Inc., that may result from necessary changes in the scope of work; and
- C. Authorize the City Attorney to execute a Fourth Amendment to Legal Service Agreement No. 24,835 with Hanson Bridgett, LLP to increase the "Do Not Exceed Limit" from \$175,000 to \$200,000 related to legal service for ongoing Desal DBO contractual issues.

EXECUTIVE SUMMARY:

This report provides an update for Council on the current drought situation in relation to the water supply outlook and work efforts related to drought response, community-wide conservation and water use regulations. In an effort to address a projected shortage in the ability of the City to meet peak demand during the summer of 2017, additional water use regulations are recommended. A turfgrass (lawn) watering moratorium, commencing January 2017, is identified as the next available measure with sufficient water savings to offset the projected supply shortage.

BACKGROUND:

Council declared Stage One and Stage Two Drought Conditions on February 11, 2014, and May 20, 2014, respectively, as a result of unprecedented drought conditions. On May 5, 2015, in response to the driest consecutive four-year period on record, Council declared a Stage Three Drought Emergency, increasing the community's water conservation target to 25 percent, and adopting a resolution for additional water use regulations on May 12, 2015. This was followed by a fifth consecutive year of minimal rainfall, with virtually no runoff to local reservoirs, which caused Council to increase the community's water conservation target to 35 percent on April 26, 2016.

DISCUSSION:

Water Supply Outlook

The last five years have now officially become the driest five year period on record by a significant margin. Rainfall for the last five years has averaged less than half of the long-term average. In accordance with the City's Long Term Water Supply Plan, depleted surface water supplies have been replaced with increased groundwater production, supplemental water purchases, and reactivation of the City's Desalination Plant.

The National Oceanic and Atmospheric Administration (NOAA) forecasts neutral conditions in relation to the El Niño/La Niña cycle during winter 2016-2017. NOAA's forecast for January - March 2017 continues to show equal chances of above average, average, and below-average precipitation during our key rainfall window. Given the unpredictable nature of El Niño and La Niña events, and the unprecedented nature of the current drought situation, the City is planning for continued drought conditions.

In an effort to continue to maximize the use of the State Water delivery system, the City secured 7,265 Acre Feet (AF) of additional imported water in 2016. This is sufficient water to keep the City's portion of the conveyance system running full through 2018. Due to the conveyance capacity limitations and the continued decline in the availability of our local surface water supplies, staff is projecting a shortage of approximately 300 AF from August through October 2017, assuming no additional delays in desalination deliveries or interruptions in groundwater production. It is important to recognize there is no longer any contingency water supply for the City. Given the duration and severity of the current drought, the City will be using all backup water sources in 2017. Should any of the planned water sources become unavailable, the City would be in a catastrophic shortage requiring more extreme measures to cut water usage. Accordingly, staff is recommending that Council consider additional actions to further reduce demand now, as discussed below. Staff continues to plan for worsened supply conditions and will return to Council with recommended additional actions should they become necessary.

Community Conservation

The City's water conservation numbers through September 2016 show a cumulative citywide average reduction of 36 percent since the Stage Three Drought declaration in May 2015. Conservation for the month of September reflects a reduction of 41 percent, compared to 2013 water demands.

The City's water customers continue to meet and exceed both the City's and the state's conservation targets with extraordinary conservation measures. The state-mandated water use reduction for the City is 12 percent below 2013 water usage. In May 2016, the state adopted new regulations that allow agencies to reduce conservation requirements by demonstrating they have sufficient supplies to meet full customer demands through 2019. Since the City remains in a severe drought condition, the City has not elected to seek a modification of its state requirement.

Water Use Regulations

For each successive year of continuing dry weather, Council has considered appropriate responses in the form of water use regulations and development restrictions, coupled with drought water rates and enhanced public outreach. These steps have been guided by the City's Water Shortage Contingency Plan. With Lake Cachuma at record low levels, groundwater basins nearing record lows, the potential for construction delays in desalination production, and a projected inability to meet peak customer demand during the coming water year, staff has been working to develop recommendations regarding changes in the City's current water use regulations. Staff evaluated measures that would generate savings sufficient to offset the projected short-term supply deficit of approximately 300 AF, with an additional 500 AF of contingency, for a total of 800 AF of additional savings over the coming water year. This would require an increase in our annual conservation target from 35 percent to 40 percent, relative to 2013 water usage. We are currently at 36 percent. In development of the regulatory options, staff was focused on identifying restrictions that would be easily understood, would result in a decrease in demand sufficient to generate adequate savings to avoid shortages in the coming year, and protection of the community's investment in trees and shrubs.

With regard to new water use regulations, last month staff presented the Water Commission and Council with a recommendation that a general ban on turfgrass watering with potable water (with limited exceptions) is the best tool for addressing the current situation. Staff projected a savings of 800 AFY (Acre Feet per Year) from this action, based on a range of assumptions yielding 500 AFY as a worst case and 1,200 AFY as the best case scenario. Coupled with the likelihood of additional demand reductions from updated community outreach and recent changes in water rates, this step will put the City in the best position to continue to meet system-wide demand with an acceptable supply buffer, barring significant added setbacks.

In the residential sector, the only exemptions proposed were watering of certified water wise turfgrasses. In the institutional sector, staff proposed exemptions for: open spaces and parks on publicly owned and operated lands, certified water wise turfgrasses, and areas of active recreation at schools and state-licensed child care facilities. In the commercial sector, staff proposed exemptions for golf course greens and tees, and lawn areas that are directly related to business activity, such as ceremonial event spaces. These will be subject to an application for exemption and must demonstrate ongoing compliance with the City's water conservation targets.

Council voiced concerns about enforcing such a ban. Staff has revisited the issue and carefully considered alternatives, but still believes a turfgrass ban is the best way to reduce demand by the required amount, while still providing customers some flexibility in how they manage their water use. At this time, the turfgrass watering ban would allow for prioritization of outdoor watering so higher value landscaping such as trees and shrubs can be saved. In response to concerns about patrolling for enforcement, staff proposes that Council consider continuing the policy of complaint-driven enforcement for the lawn watering ban. Current complaint-driven enforcement has been successful in educating violators and has avoided the need to assess financial penalties thus far. The Santa Barbara community has been extremely compliant and supportive of the City's drought-related policies and goals.

Development Restrictions

Council previously discussed the potential for development restrictions in December 2014, April 2015, April 2016, and most recently on September 20, 2016. On these occasions, Council weighed the small amount of water savings gained by implementing development restrictions against the potentially negative impact on the local economy and decided to forego instituting development restrictions. Further restricting development currently in the pipeline would not provide a reduction in demand during the timeframe needed to meet the projected summer 2017 shortfall.

Schedule

Implementation of the turfgrass watering restrictions would take effect as early as January 1, 2017, upon adoption by Council in December, in order to begin achieving savings as soon as possible. Furthermore, moving forward in the winter months also allows for a smoother transition for the community when the need for outdoor lawn watering should be unnecessary with rainfall similar to the past few years. Following Council adoption, staff would increase community outreach to raise public awareness. It will be critical, if drought conditions continue, to have regulations in place that will allow the City to fully achieve the required conservation at the start of the 2017 irrigation season. Should water supply conditions improve this winter, staff would revisit these restrictions; however, if there is no improvement, the City will be well positioned to address the sixth year of a record drought.

Rationing

At the Council meeting on September 20, 2016, the concept of rationing was revisited and briefly discussed. Staff continues work to develop a rationing plan, recognizing that this would be the option of last resort to reduce water usage. Rationing would require that all 27,000 potable service connections be put on a monthly water budget. Water used in excess of that budget would be deemed illegal, with fines that could lead to water service being terminated. The preliminary estimates for residential water budgets under rationing is not likely to be sufficient for the average property to continue any outdoor watering. Staff has also discussed with Council a potential "Drought Impact Fee," which is different from rationing because it would be applied to customer water bills (in compliance with Prop 218 requirements) as a means of maintaining adequate system revenue as increasing conservation becomes necessary.

Public Outreach

Staff engaged the services of Katz and Associates, Inc., (Katz) for assistance with public outreach, in an amount of \$33,095, to assist staff resources that are spread thin as a result of drought workload. Based on the worsening condition of our water supplies, staff would like to increase the contract with Katz by \$52,294 to include assistance with: strategic public outreach planning, development of public informational materials on water supply challenges, and general media support. Katz was selected through a competitive Request For Proposal process and was chosen for their expertise with difficult water-related messaging for many California water agencies. Staff recommends amending the existing Professional Services Agreement with Katz and Associates, Inc., increasing the original contract by \$52,284 for a total not to exceed amount of \$85,389, which includes \$4,754 in extra services of Katz and Associates, Inc., that may result from necessary changes in the scope of work.

Tree Health

As the City moves into the sixth year of this drought, there remains a strong concern for protecting both private and public trees. The Parks and Recreation (P&R) Department developed a drought response plan in 2014 that prioritized how open space areas and public trees would be managed during the drought. P&R is revisiting this plan with a focus on additional actions that could be taken as the drought continues to intensify. As we contemplate a ban on turfgrass watering, one of the main objectives is to ensure there is adequate water for trees and shrubs, which represent a substantial long-term community investment. To help the community, P&R has been working closely with Water Conservation to develop information for homeowners and landscapers on how best to effectively and efficiently water trees. Although trees receive some benefit from watering lawns and other groundcover, the most effective method is through slow, deep watering that saturates deeper into the soil where lawn and groundcover roots don't grow.

Legal Services Contract

The law firm of Hanson Bridget LLP provided legal assistance with negotiating and drafting the Desal DBO contract. The firm has extensive experience in public entity contracting for complex public infrastructure projects including design, build and operate type procurement projects. The current contract with Hanson Bridget LLP has a “do not exceed” limit of \$175,000. Staff proposes to increase the limit to \$200,000. There are ongoing issues with regard to the DBO contract that require Hanson Bridget’s specialized legal assistance.

BUDGET/FINANCIAL INFORMATION:

Increasing the conservation goal from 35 percent to 40 percent is estimated to decrease revenues by \$1.6 million for the remainder of Fiscal Year 2017. Current rates reflect the use of \$7 million in reserves for this fiscal year. Staff has explored the use of a drought impact fee to offset the projected loss, but given the amount of resources and time it would take to get the fee in place, it is recommended that the additional projected losses be absorbed by reserves and the losses be addressed in Fiscal Year 2018 rate development. Staff will be coming to Council in November with a contract to initiate Fiscal Year 2018 water rate development.

SUSTAINABILITY IMPACT:

The recommended additional drought regulations are appropriate at this time, given the need to further stretch remaining water supplies. It is estimated that additional regulations will increase cumulative water savings to 40 percent on an annual basis, with monthly savings ranging from 32 percent to 50 percent. Staff will monitor the cumulative water savings from January 2017 through May 2017 and will use the information as a basis for determining whether or not to recommend additional action for Council consideration in the spring of 2017.

WATER COMMISSION:

At its meeting on October 20, 2016, the Water Commission discussed the proposed water use regulations, which includes moving to a 40% water conservation target and a ban on turfgrass watering. In a special motion, the Commission voted in support of moving forward with the water use regulations as proposed to ensure adequate water is available to meet peak demands in the summer of 2017 and provide some level of contingency water should our supply situation worsen.

Council Agenda Report

Stage Three Drought Update And Continuation Of Discussion On Additional Water Use Regulations

November 1, 2016

Page 7

ATTACHMENT: Discussion Draft – Revised Stage 3 Resolution (substantive changes only)

PREPARED BY: Joshua Haggmark, Water Resources Manager/BF/cmw

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office

RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF
SANTA BARBARA ESTABLISHING UPDATED WATER
USE REGULATIONS AND DEVELOPMENT
RESTRICTIONS EFFECTIVE DURING A STAGE THREE
DROUGHT EMERGENCY AND REPEALING RESOLUTION
NOS. 14-009, 14-027, 15-036 AND 16-023

WHEREAS, the City of Santa Barbara, along with the rest of the State of California, has experienced the driest five-year period on record and such conditions have resulted in the depletion of surface water resources that are the City's primary water supply;

WHEREAS, the City's 2010 Urban Water Management Plan, which was updated in 2015, sets forth the City's Water Shortage Contingency Plan;

WHEREAS, pursuant to the Water Shortage Contingency Plan, on February 11, 2014, the City Council adopted Resolution No. 14-009 declaring a Stage One Drought Condition and on May 20, 2014, the City Council adopted Resolution No. 14-027 declaring a Stage Two Drought Condition and imposing water use regulations;

WHEREAS, due to the continued lack of sufficient rainfall, on May 12, 2015, the City Council adopted Resolution No. 15-036 declaring a Stage Three Drought Condition, updating and augmenting water use regulations, and requiring a twenty-five percent (25%) reduction from the year 2013 normal citywide water use;

WHEREAS, on April 26, 2016, the City Council adopted Resolution No. 16-023 to increase the required citywide reduction from normal citywide water use to thirty-five percent;

WHEREAS, there has been a continuing lack of rainfall sufficient to make a substantial improvement to the water supply situation, which has exacerbated the current drought, thereby making it increasingly necessary to conserve existing water supplies to protect the public health, safety and welfare if the current drought continues;

WHEREAS, the Water Shortage Contingency Plan provides that, when the City determines that the water supply for the current or impending water year is projected to be more than 10 percent below projected normal demand, a Stage Three Water Shortage Emergency shall be declared, and such conditions continue to exist;

WHEREAS, Santa Barbara Municipal Code Section 14.20.215 provides for the establishment, by resolution of the City Council, of water use rules and regulations necessary to restrict and regulate the use of water provided by the City's water distribution system during drought, and provides for exemptions to such regulations;

WHEREAS, it is the intent of the City Council to minimize inequities resulting from the implementation of water use regulations;

WHEREAS, on May 9, 2016, the Governor issued Executive Order B-37-16, Making Water Conservation a California Way of Life by permanently prohibiting practices that waste potable water and extending emergency water conservation regulations through the end of January 2017; and

WHEREAS, the City Council desires to preserve the substantial long-term investment in the community's trees and shrubs and to reserve the remaining amount of available irrigation water for use on trees and shrubs.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SANTA BARBARA AS FOLLOWS:

SECTION 1. Since February 11, 2014, there has existed within the City of Santa Barbara a continually worsening Drought Condition and a forty percent (40%) water use reduction from normal citywide calendar year 2013 water use is now required, based on the City's projected water supply.

SECTION 2. For the protection of public health and safety, the following drought water use regulations regarding use of potable water from the City's water system 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. Except as otherwise prohibited by these regulations, any outdoor use of potable water through a hose, pipe, or faucet is permitted only if 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.~~

b. The outdoor use of potable water from a hose, pipe, or faucet (even if delivered by use of a self-closing valve as provided in Section 2 a) for the purpose of cleaning buildings, pavement, driveways, sidewalks, tile, wood, plastic, or other hard surfaces is prohibited.

Exceptions:

- i. When such use is the only feasible means of correcting an immediate threat to health and safety.
- ii. In preparation for painting or sealing, provided such washing occurs immediately prior to such painting or sealing.
- ~~iii. 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.~~

Water used pursuant to the above exceptions shall be 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.

c. Effective January 1, 2017, irrigation of lawns (by any means) is prohibited. For purposes of this paragraph, a lawn shall mean any area that is planted in warm-season or cool season turfgrasses.

Exceptions:

- i. Irrigation using non-potable water;
- ii. Irrigation of playing fields used primarily for active recreation at schools, State licensed child care centers, and similar locations as determined by the Public Works Director;
- iii. Irrigation of parks and recreational non-residential open spaces that are publicly owned and operated;
- iv. Irrigation of greens and tee areas at golf courses;
- v. Irrigation of a lawn area, the use of which is directly related to a business activity, subject to prior authorization by the Public Works Director and documentation of ongoing compliance with the City's targeted reduction in water use;
- vi. Irrigation of areas planted entirely with turfgrasses that are included on a list of low water use grasses approved by the Public Works Director and posted on the City's Internet site, subject to prior authorization by the Public Works Director.

d.d. Outdoor irrigation of vegetation other than lawns, including any grass, shrub, plant, tree, or groundcover, is prohibited, except between the hours of 6:00 p.m. and 8:00 a.m. of the following day if automatically controlled and between the hours of 4:00 p.m. and 10:30 a.m. of the following day if manually controlled. 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;
- 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.

d.e. 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.

e.f. 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.

f.g. Irrigation of turf on public street medians with potable water is prohibited.

h. The issuance of permits for use of potable water from fire hydrants is suspended. Applicants shall be directed to apply for a permit to use recycled water.

g.i. Washing of vehicles and boats is prohibited except 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 water recycling requirements.

h.i. Use of water in any fountain or other decorative water feature is prohibited.

Exceptions: Fountains or other decorative water features that are equipped with a recirculation system are permitted in any of the following locations:

- i. indoor locations;
- ii. residential properties;
- iii. When total water surface area is less than or equal to twenty five (25) square feet;
- iv. Where, since the May 20, 2014 adoption of Stage Two regulations, aquatic life existed in the fountain or decorative water feature.

i.k. Swimming pools and spas must 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.

j.l. Draining and refilling a pool in excess of one third of the volume 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.

k.m. 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 not serve water except upon specific request by a customer.

l.n. 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.

~~m.o.~~ 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.

SECTION 3. Violation of any regulation in Section 2 of this Resolution is subject to the penalties and charges set forth in Santa Barbara Municipal Code Section 14.20.226.

~~SECTION 4. For the protection of public health and safety, the following drought-related development restrictions is 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. Irrigation with potable water of landscapes outside of newly constructed homes and buildings must be accomplished in a manner consistent with regulations and other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.~~

~~b. Exemptions:~~

~~i. Projects with an application submitted for a building permit prior to adoption of this Resolution are exempt from item 4.a above.~~

~~ii. 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.~~

~~iii. Administrative Guidelines for implementation of item 4.a. shall be prepared by the Community Development Director.~~

SECTION 4. Resolution Numbers 14-009, 14-027, 15-036 and 16-023 are hereby repealed in their entireties and of no further force or effect.



PUBLIC WORKS DEPARTMENT

WATER RESOURCES DIVISION

STAGE THREE DROUGHT UPDATE & ADDITIONAL WATER USE REGULATIONS

November 1, 2016

Outline

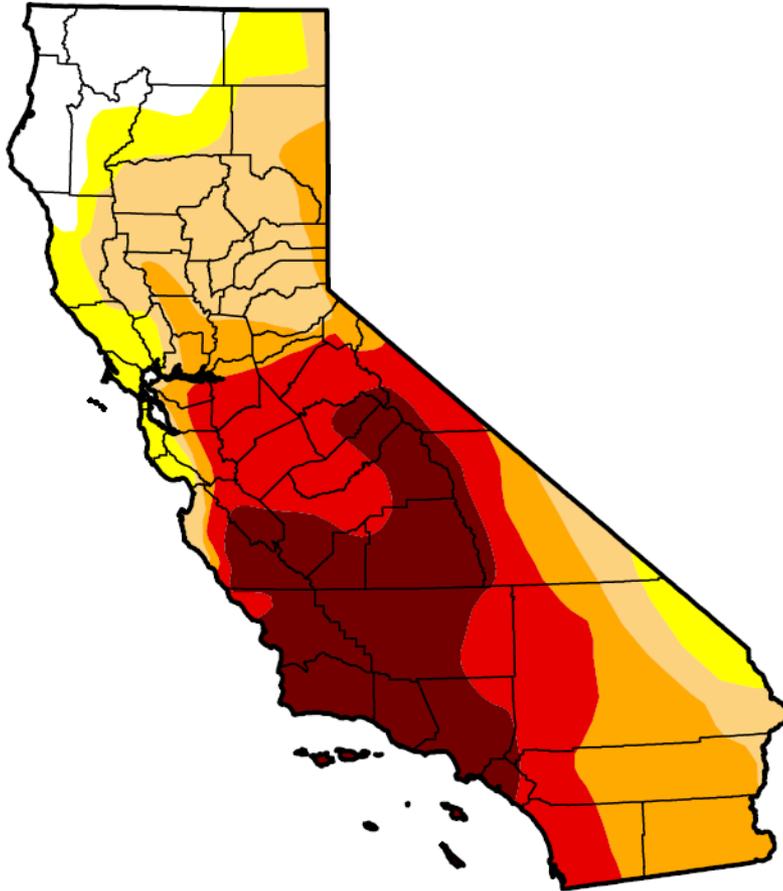
- Drought Status
- Demand Status
- Water Supply Status
- Current & Proposed Water Supply Strategies
- Proposed Additional Water Use Regulations
- Public Outreach
 - Tree Watering
 - Contract for Public Outreach Support
- Financial Impacts
- Rationing



DROUGHT STATUS

U.S. Drought Monitor California

October 25, 2016
(Released Thursday, Oct. 27, 2016)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.96	91.04	81.12	61.80	42.80	21.04
Last Week <i>10/18/2016</i>	7.77	92.23	81.12	61.80	42.80	21.04
3 Months Ago <i>7/26/2016</i>	0.00	100.00	83.59	59.02	42.80	21.04
Start of Calendar Year <i>12/29/2015</i>	0.00	100.00	97.33	87.55	69.07	44.84
Start of Water Year <i>9/27/2016</i>	0.00	100.00	83.59	62.27	42.80	21.04
One Year Ago <i>10/27/2015</i>	0.14	99.86	97.33	92.27	71.08	46.00

Intensity:

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

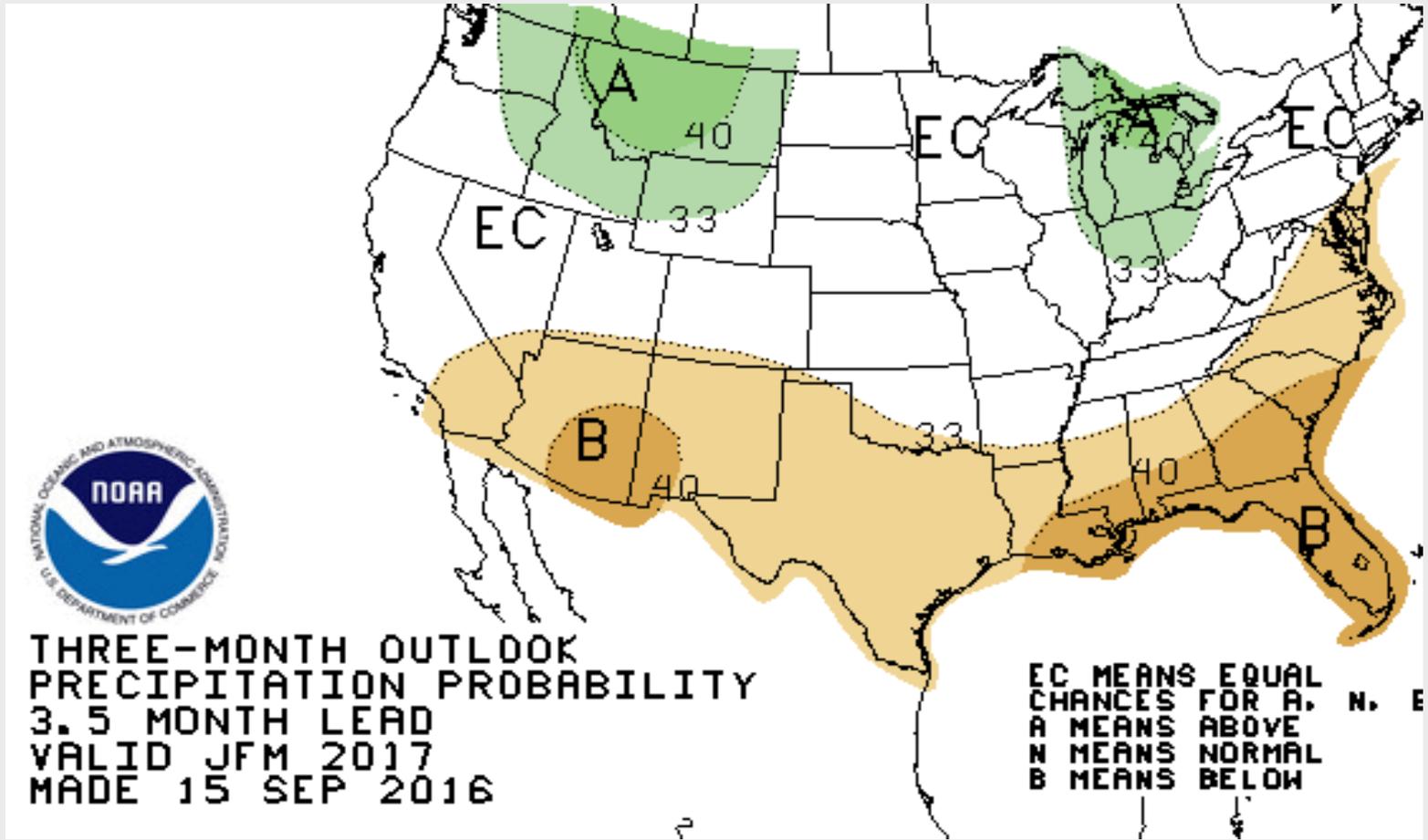
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:
David Simeral
Western Regional Climate Center



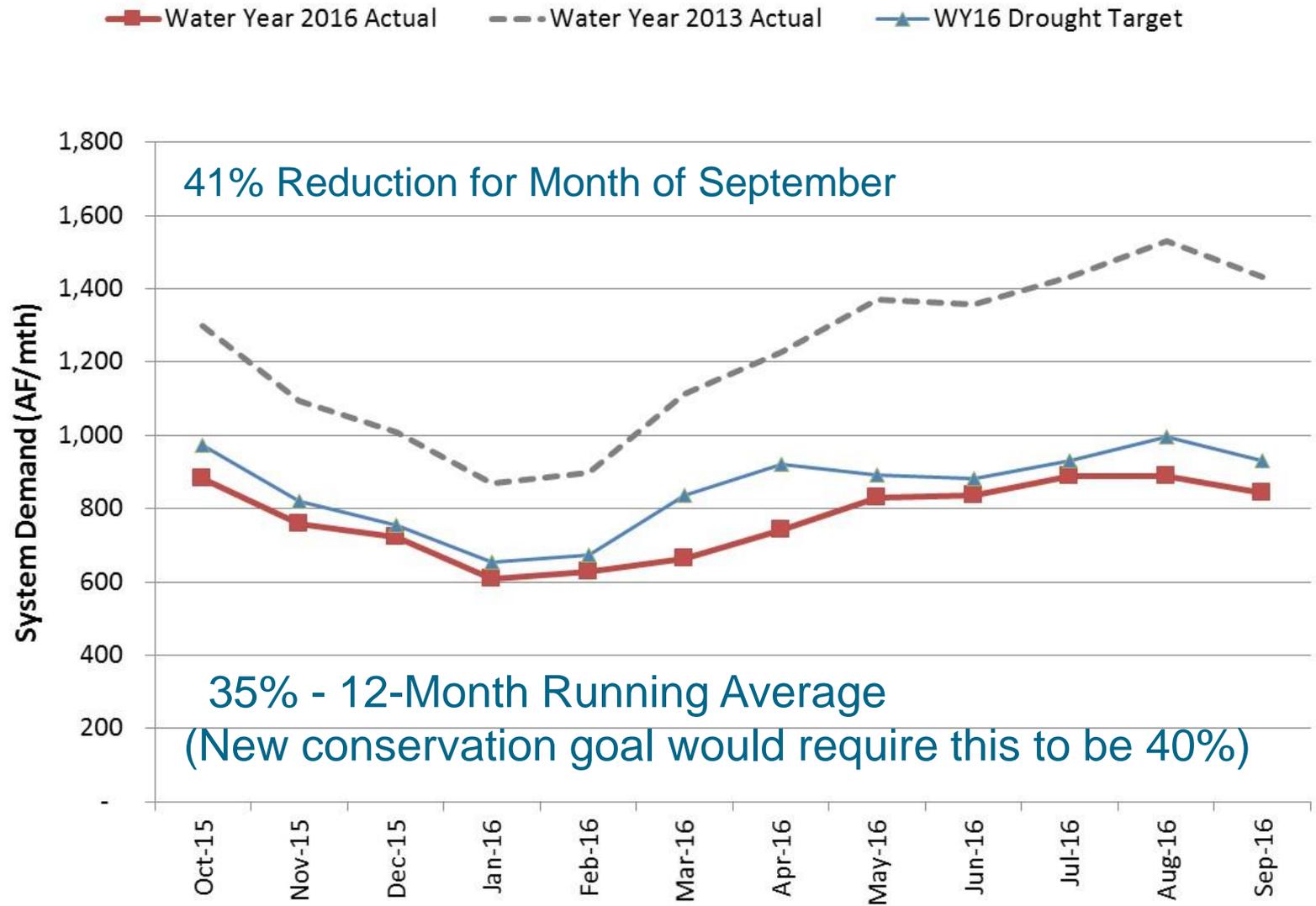
<http://droughtmonitor.unl.edu/>

Rainfall Forecast for January-March 2017





DEMAND STATUS





SUPPLY STATUS

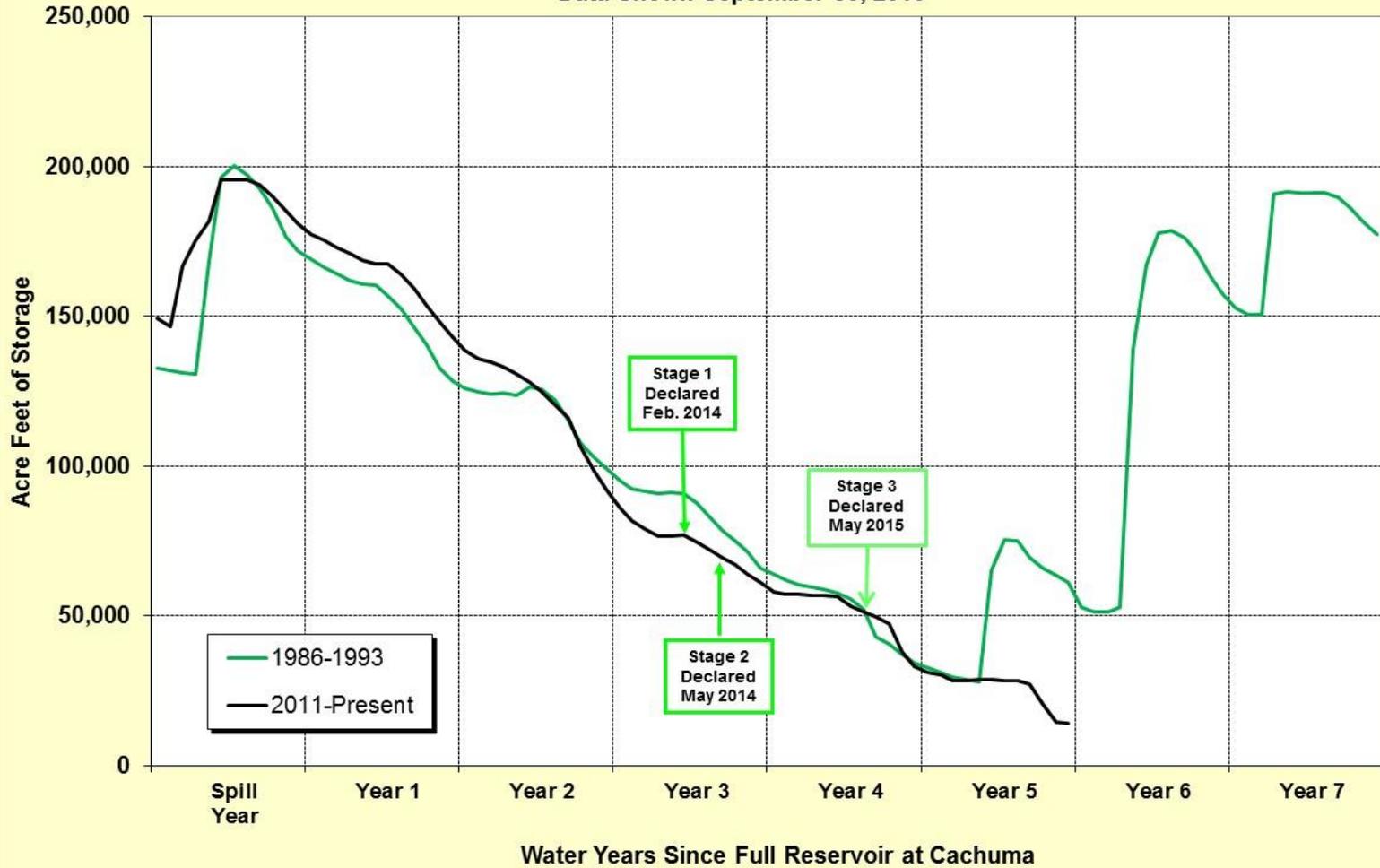
Lake Cachuma



- Storage as of 10/17/16
 - 14,101 Acre Feet
(7.3% of capacity)
- City carryover water to be exhausted by December 2016
- Lake Cachuma is critical to storage & conveyance of imported water
- Waiting on confirmation of new evaporation formula
- Updated information shows extension of state water conveyance will be required by Spring 2018 to continue to move water through the lake
 - Design has been initiated with CCWA taking the lead

Cachuma Storage: Current Drought & 1986-93 Period

Data Shown September 30, 2016





**Video: Aerial Footage of Cachuma Reservoir
September 2016**

Lake Cachuma - State Water Rights Order

- Draft Order Issued September 9, 2016
- Cachuma Conservation Release Board (CCRB) working with a biology/hydrology team to evaluate:
 - *Effects of invasive species such as bass, and other predators on steelhead*
 - *Long-Term Impacts to this primary water supply for more than 200,000 residents*
- CCRB and members committed to protecting the primary water supply for communities throughout the region, coastal agriculture, and important environmental priorities
- Granted a 45-day extension from the State – Comments due by December 9, 2016

Imported Water

- *Imported Water Supply*

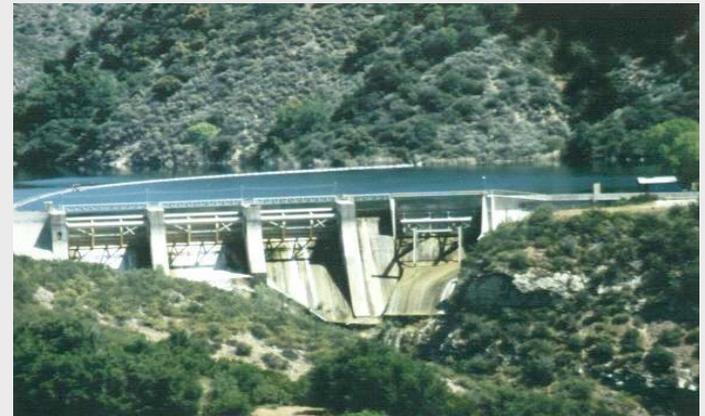
- 7,265 AF of imported water secured in 2016
 - *This water is available in storage at San Luis Reservoir*
- Planning on 35% allocation in 2017
- Will be looking to secure minimal supplemental water in 2017

- *Delivery Constraints on Imported Water*

- CCWA (who oversees State Water deliveries) has implemented improvements to maximize deliveries to the lake
- Pipeline size limits guaranteed City capacity to 3,300 AFY
- Anticipate all agencies will be maximizing all available capacity for delivery
- Sufficient water secured to fill the City's State Water pipeline capacity into 2019

Gibraltar Reservoir

- Storage as of 10/17/16
 - 535 Acre Feet (10.2% of capacity)
- Rey Fire Impacts
 - Anticipating higher runoffs as a result of burned watershed
 - Burn Area Emergency Response (BAER) report estimates 500 AF of debris to flow into the reservoir in the coming years as a result of the fire
 - Will further reduce storage capacity (current storage capacity is 5,992 AF)



Groundwater Wells

- All 8 potable groundwater wells are in production
- Storage Unit #1 – Downtown Groundwater Basin
 - Basin is currently at ~30% of capacity with a projected remaining yield of 3,000 AF*
 - Currently extracting ~2,000 AFY
 - Sufficient water has been extracted from the basin to expect some level of seawater intrusion*
 - Monitoring of seawater intrusion continues
 - *Increasing frequency of monitoring and adding locations*
- Foothill Basin
 - Basin is currently at ~35% of capacity with a remaining yield of 2,000 AF*
 - Currently extracting ~1,000 AFY
- Both basins are approaching historic lows
- Water Supply Planning does anticipate reduced production

*Estimates based on USGS Groundwater Model

Desalination Project

- *Offshore*

- Barge arrived in Santa Barbara to begin offshore work on October 26th
 - *Loaded with pumps, screens, and piping to complete intake work*
- Work scheduled to be complete by mid-December

- *Schedule*

- Contractor is updating schedule now:
 - *Anticipate some level of delay from the late January 2017 startup*
 - *Construction schedule remains vulnerable to delays*



Desalination Expansion

- *Treatment*
 - Working on options for the next phase of expansion
 - Anticipate getting updated costs this Winter
- *Conveyance*
 - Working on a new conceptual design that could reduce costs and simplify conveyance
 - Anticipate confirming alignment by the end of the year
- *Schedule*
 - Working towards having updated costs and schedule for consideration of expansion in spring 2017

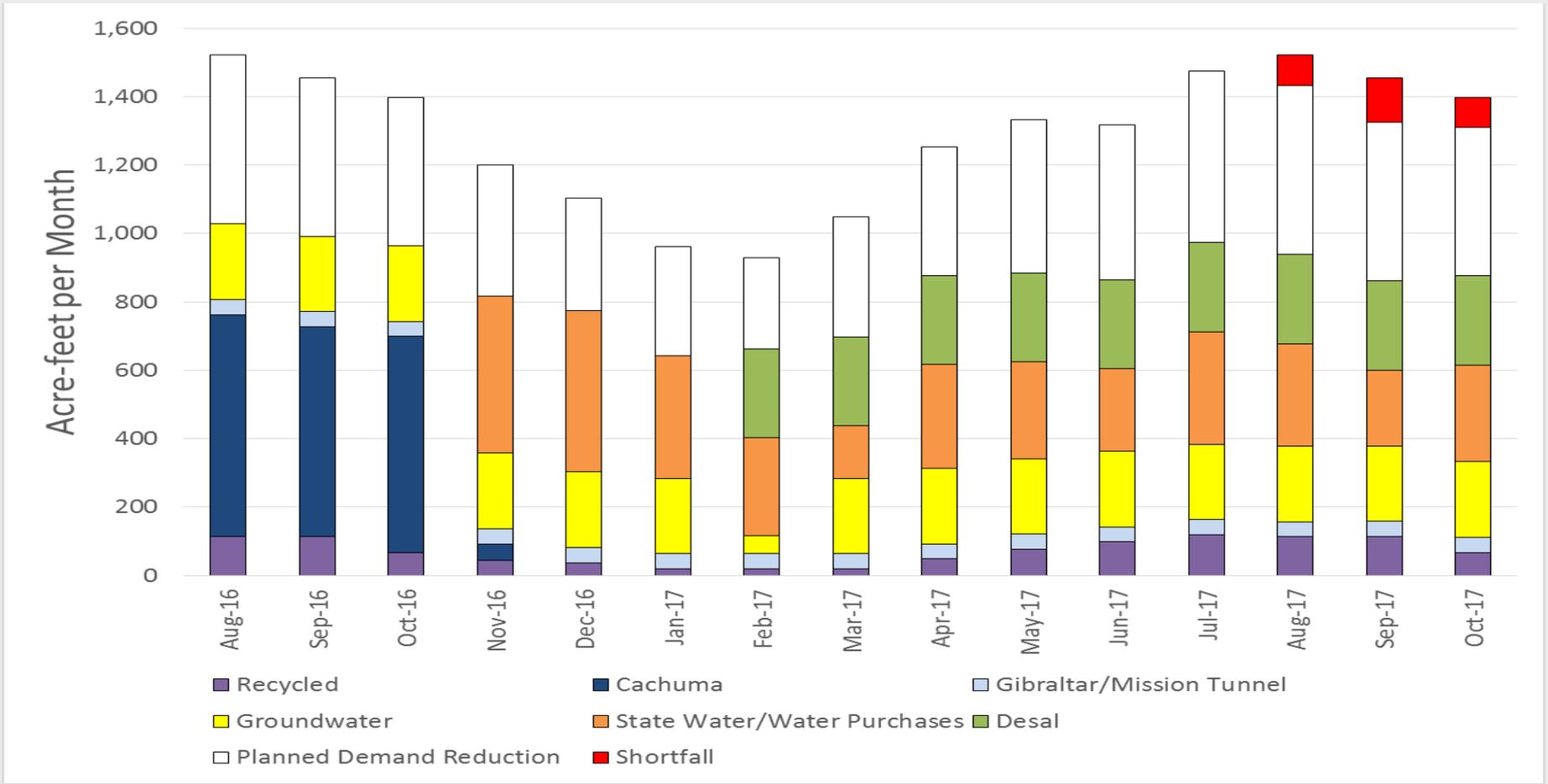
Renewable Energy for Desal

- City Energy Manager has been working on options for renewable energy to power desal and other Water Resources facilities
- Working on a status update presentation which will include:
 - Community Choice Aggregation
 - El Estero Cogen – Increased Methane Production
 - Energy Offset Credits
 - Solar PV Sites
 - Battery Storage



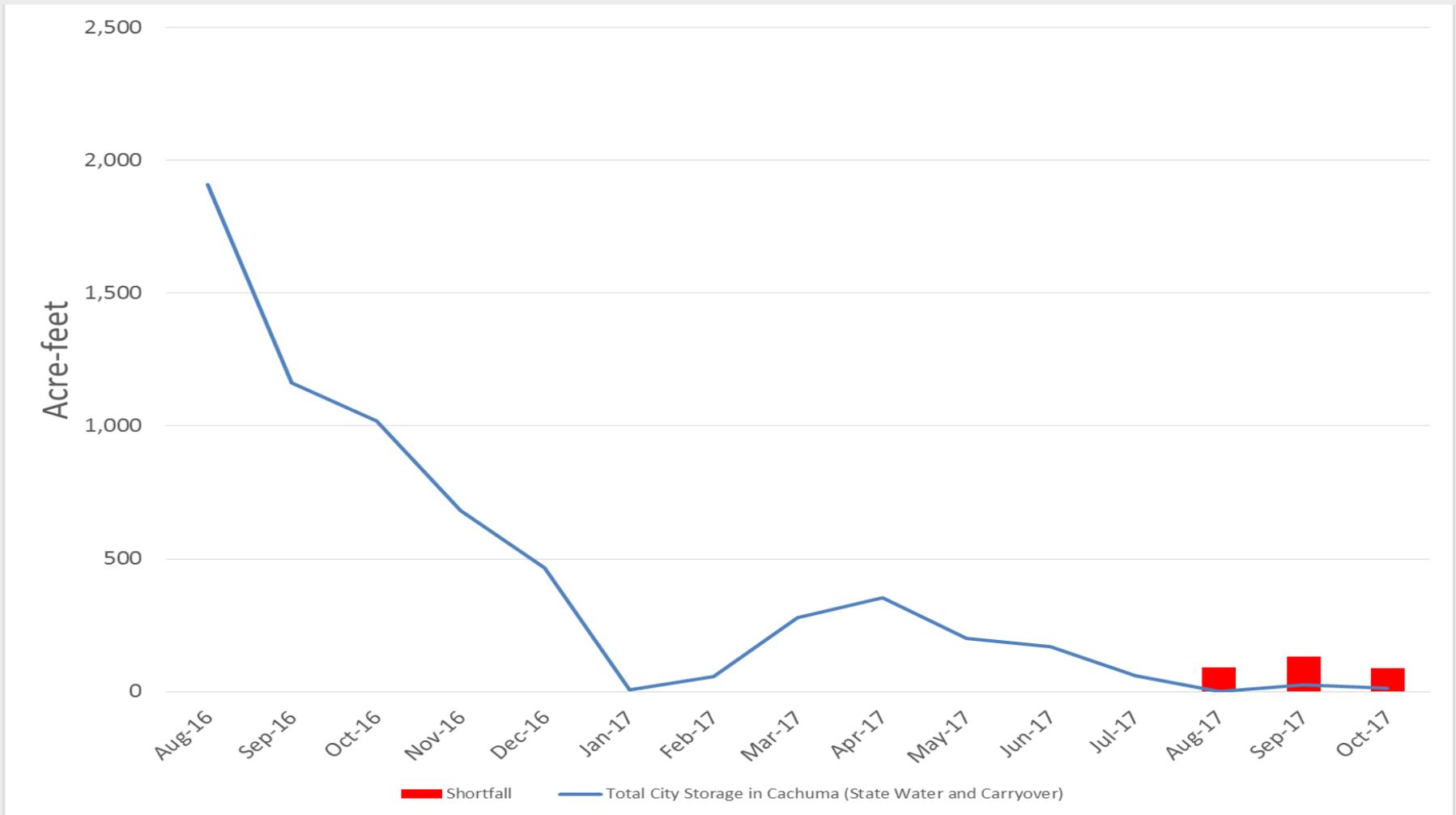
CURRENT WATER SUPPLY STRATEGY

Monthly Supply Mix





City's Projected Cachuma Storage & Supply Shortfall

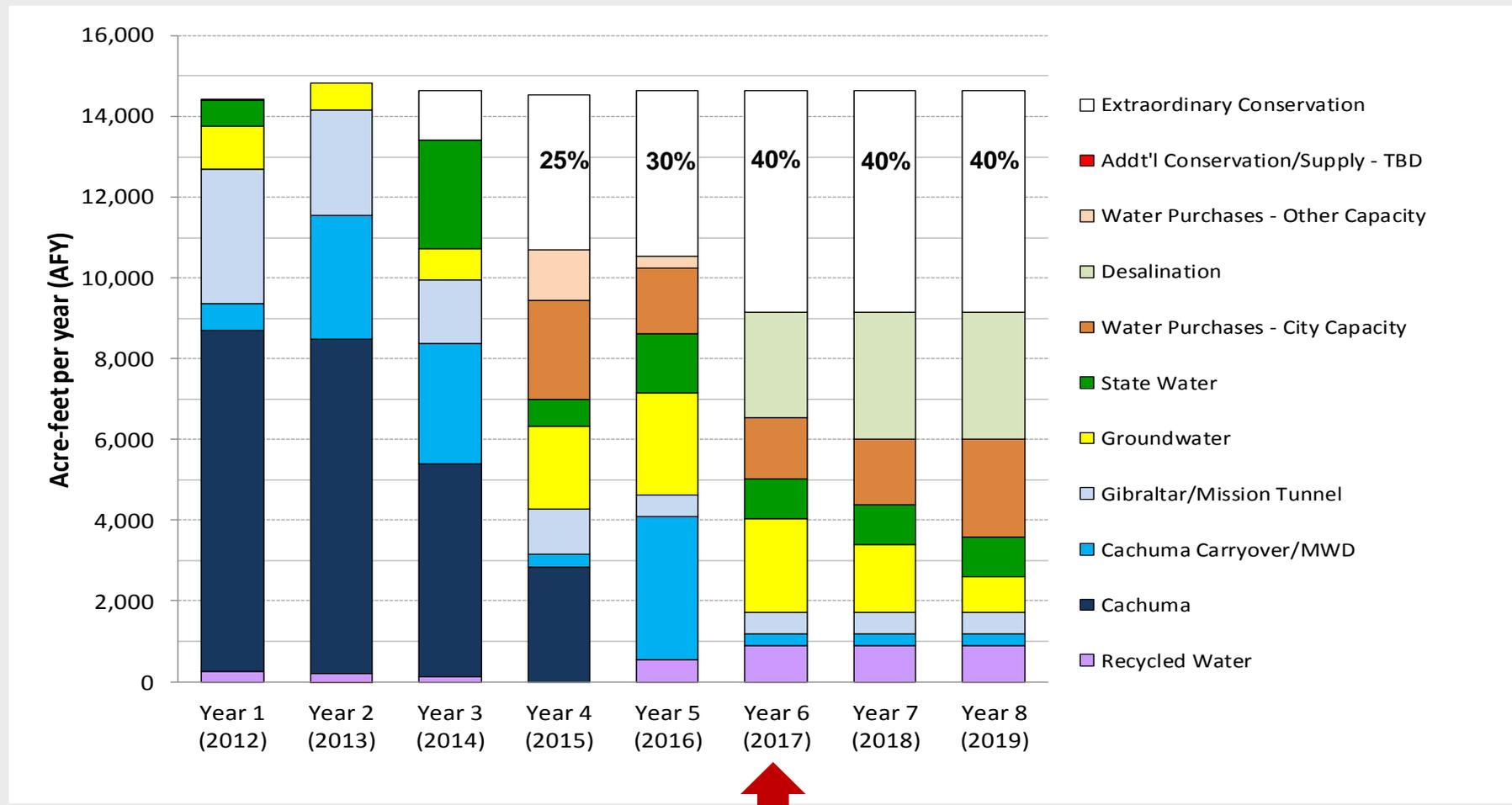




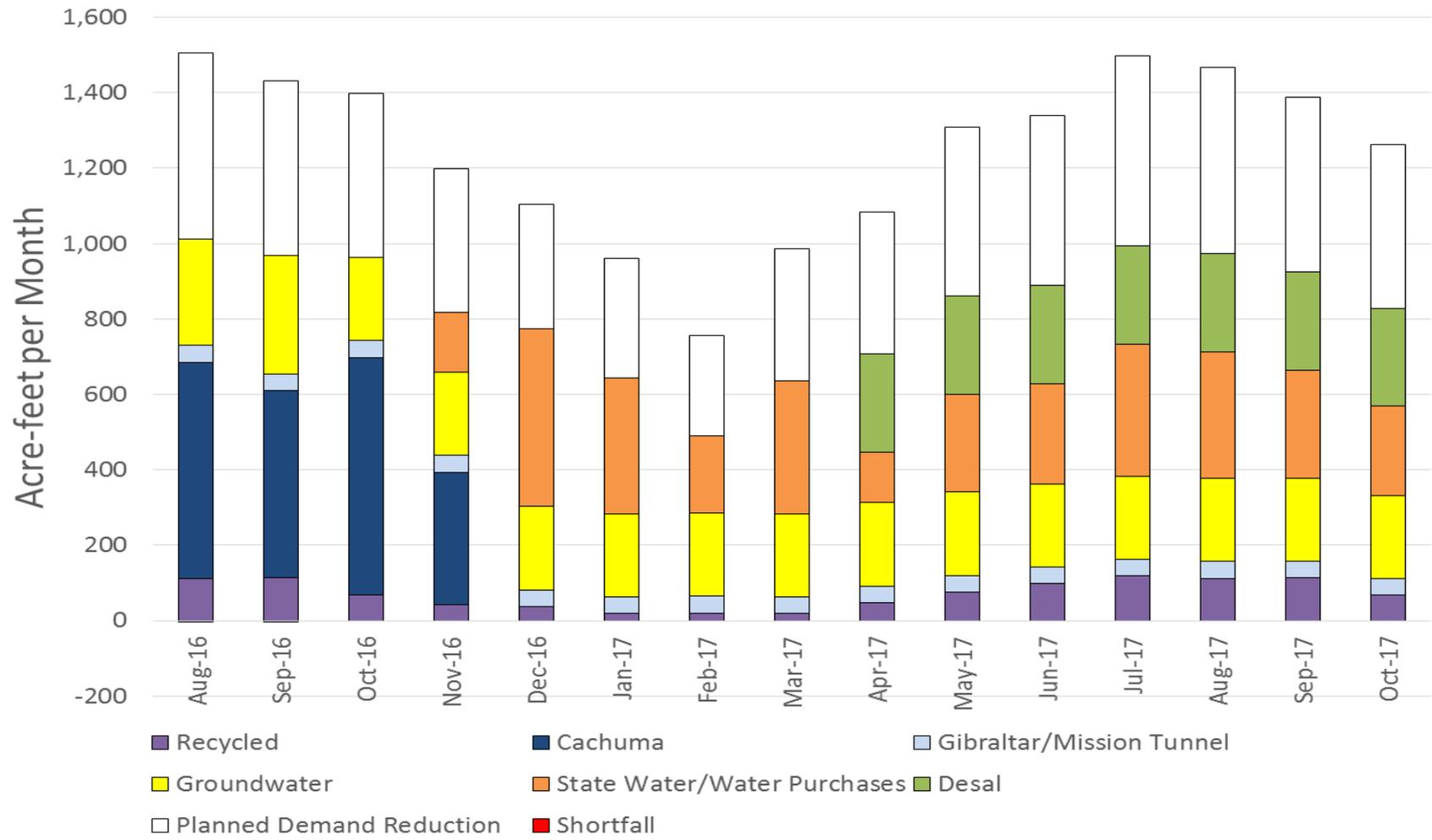
PROPOSED WATER SUPPLY STRATEGY

Proposed Supply Strategy

(based on no reservoir inflows, 35% State Water Allocation, 40% conservation)



Projected Monthly Supply Mix
Scenario 2: 40% Conservation
Version: 10/18/16





PROPOSED ADDITIONAL WATER USE REGULATIONS

Key Issues for Demand Reduction Strategy

- Water Conservation 12-Month Running Average – Currently 35%
- The City faces a worsening water supply situation; shortfall of 300 AF projected for Summer 2017
- Need to re-establish contingency supply of 500 AF
- Goals for new demand reduction measures:
 - *Protect the community's investment in trees and shrubs*
 - *Minimize impacts to economic activity in the community*
 - *Generate 800 AF of new savings; translates to a target conservation goal of 40%*
- Staff has estimated savings of 500 – 1,200 AFY from a general ban on turfgrass irrigation; no other measures identified with comparable savings potential

Summary of Proposed Draft Resolution

- Increase water conservation target to 40% citywide (12-month running average)
- Requiring the use of recycled water for construction activities (i.e. dust control and soil compaction)
- General ban on irrigation of turfgrass with potable water
 - *Exceptions:*
 - *Playing fields at schools and child care centers that are used for active recreation*
 - *Recreation areas at publicly owned parks and open spaces*
 - *Golf course putting greens and tees*
 - *Watering of certified water wise grasses*
 - *Turf areas directly related to the business activity (e.g. ceremonial event spaces) on commercial and institutional properties*
 - Subject to application and meeting City conservation targets

Schedule

Recommendation for adoption of turfgrass watering restrictions anticipated December 6, 2016.

- Recommend regulations taking effect January 1, 2017
- Winter rainfall will smooth the transition
- Allows opportunity for public outreach and education to achieve full implementation by start of 2017 irrigation season
- Puts City in best possible position for potential Year 6 of drought
- Can be adjusted if water supplies improve this winter

Enforcement

- Currently, water use regulation enforcement is complaint driven
- Recommend continued use of complaint driven enforcement for turfgrass restriction
- Violation process already defined in Municipal Code
 - 1st complaint - Courtesy notice, phone call, or letter (emphasis on education)
 - 1st violation - Door hanger and warning letter
 - 2nd violation - \$250 fine per violation
 - 3rd violation - \$250 fine plus flow restrictor
 - 4th violation - \$250 fine plus water shutoff



PUBLIC OUTREACH

Parks and Recreation Department Drought Plan Overview

- Strategic Drought Plan
- Historic and Specimen Tree Drought Plan
- Primary considerations:
Select turf, planter beds,
trees



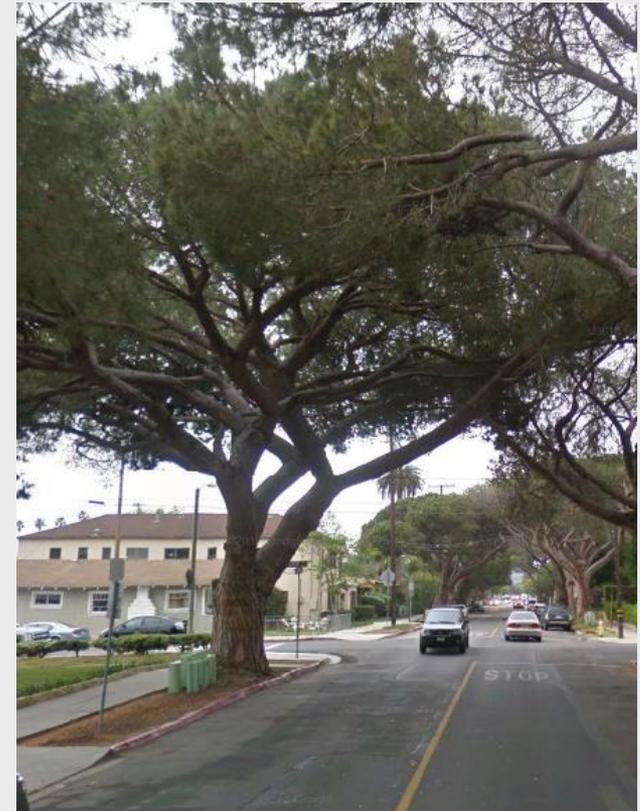
Park Turf Irrigation Priorities

- Safety and recreational use
- Revenue generation – event venues
- Park trees watered
 - Hose and probe
 - Water truck



Street Tree Irrigation

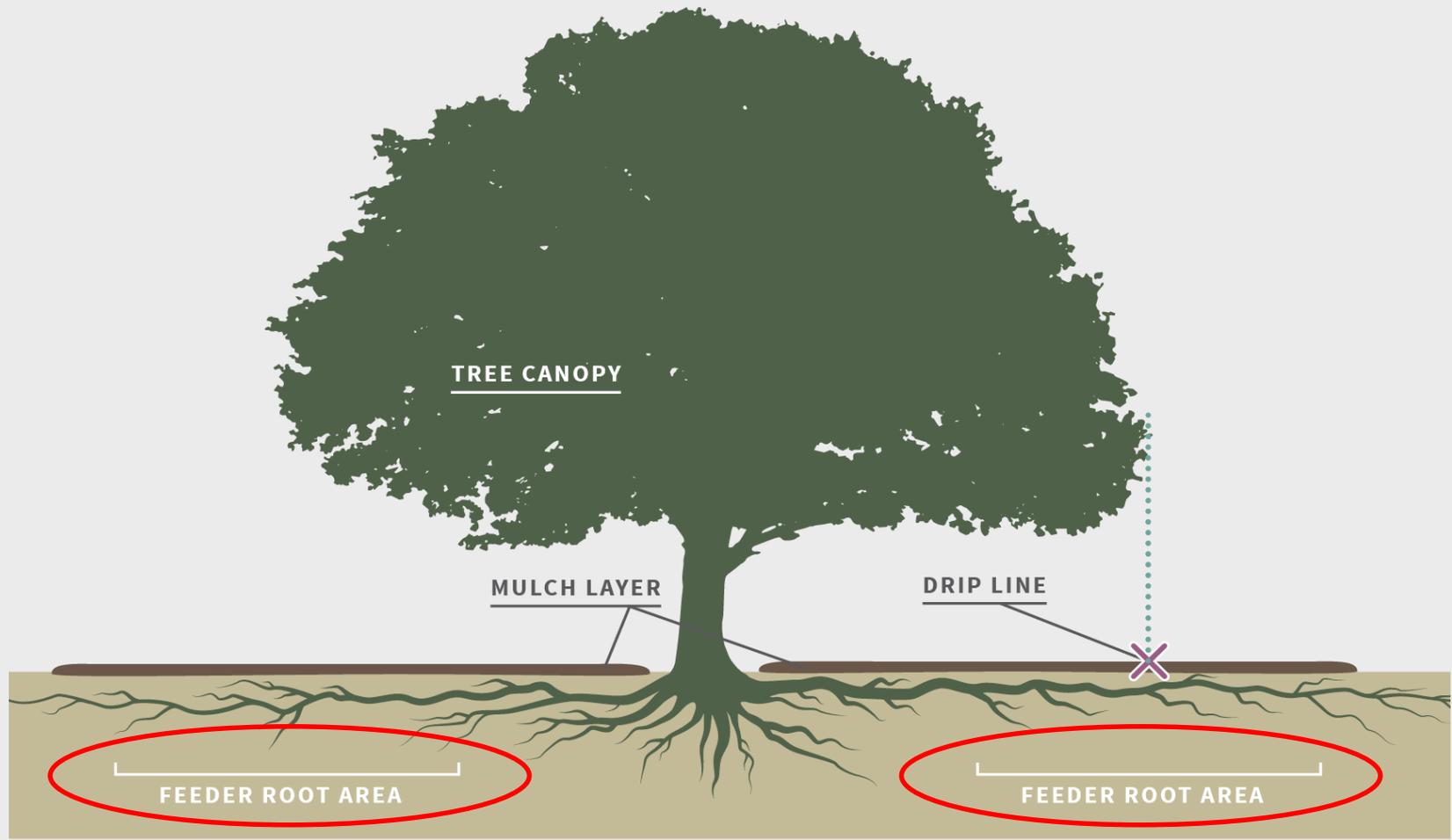
- Street Trees
 - Young/establishing
 - Historic, specimen, rare
 - Susceptible to drought
- Water truck and trailers
- Water bags and Irricades
- Community outreach



Irricades and Gator Bags

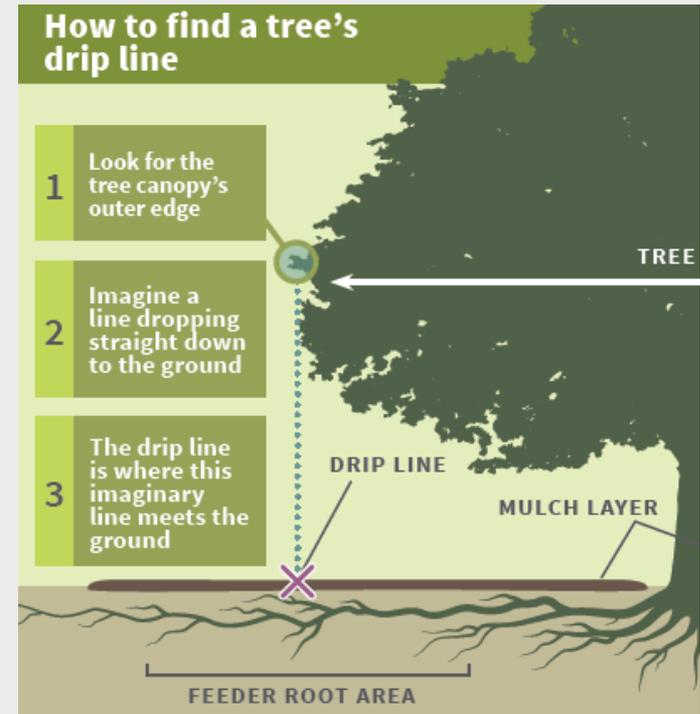


Where to Water Trees



Outreach: Save Water & Save Trees!

- Collaboration between Water Resources and Forestry
- Increased outreach & resources:
 - Graphical flier
 - Comprehensive webpage with FAQs
 - Video tutorial
 - Public workshops



Public Outreach

- Free Water Checkup program
 - Most popular program
 - 2013: avg. of 56/month
 - 2016: avg. of 120/month
- Landscape Rebate program
 - Average water savings per customer: 19%
 - 2013: avg. of 4/month
 - 2016: avg. of 30/month



Public Outreach Support Services

- Requesting approval to increase contract with Katz and Associates
- Scope includes:
 - Strategic public outreach plan for drought
 - Educational messaging for water supply challenges
 - Media relations
- Increase contract by \$52,294, which includes \$4,754 in extra services



FINANCIAL IMPACTS

Budget & Financial Considerations

- Expect added revenue loss with new regulations -\$1.6 Million in FY17
- Planning additional use of reserves
- Exploring Drought Impact Fee
 - *Offsets revenue loss from added conservation*
 - *Fixed amount added to all units of water used*
 - *Similar to approach taken by other agencies*



RATIONING

Rationing

- Option of last resort to reduce water demands
- Not being considered now, however may be necessary if drought conditions worsens
- Requires establishing a water budget for every customer
- Average user budget would be limited to no outdoor watering
- Anticipate having a rationing plan available for discussion in spring 2017

For more information:

www.SantaBarbaraCA.gov/Water

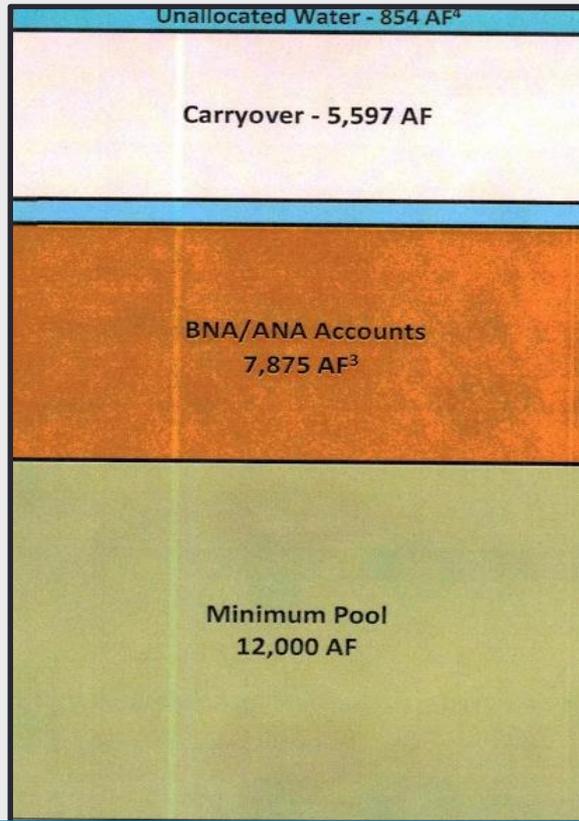
Call: 564-5460



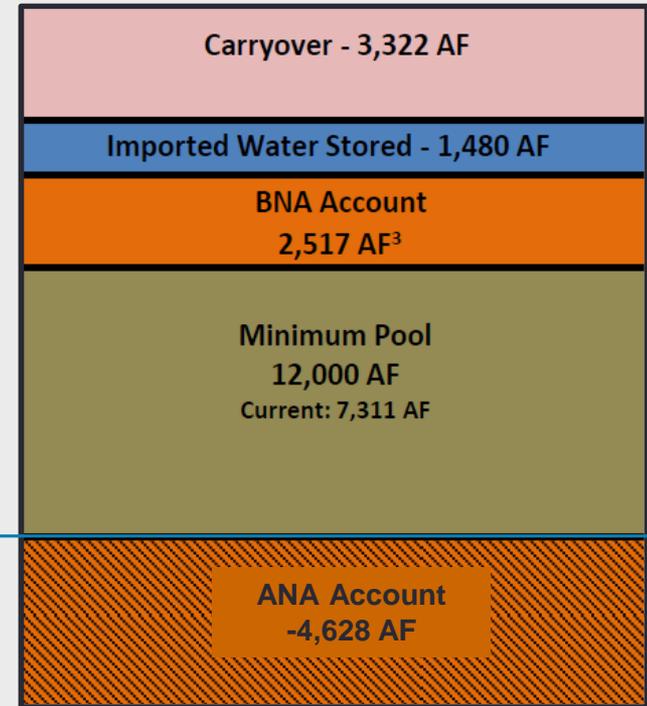
Backup slides

Cachuma Storage – Before & After Release

June 30th



August 31st

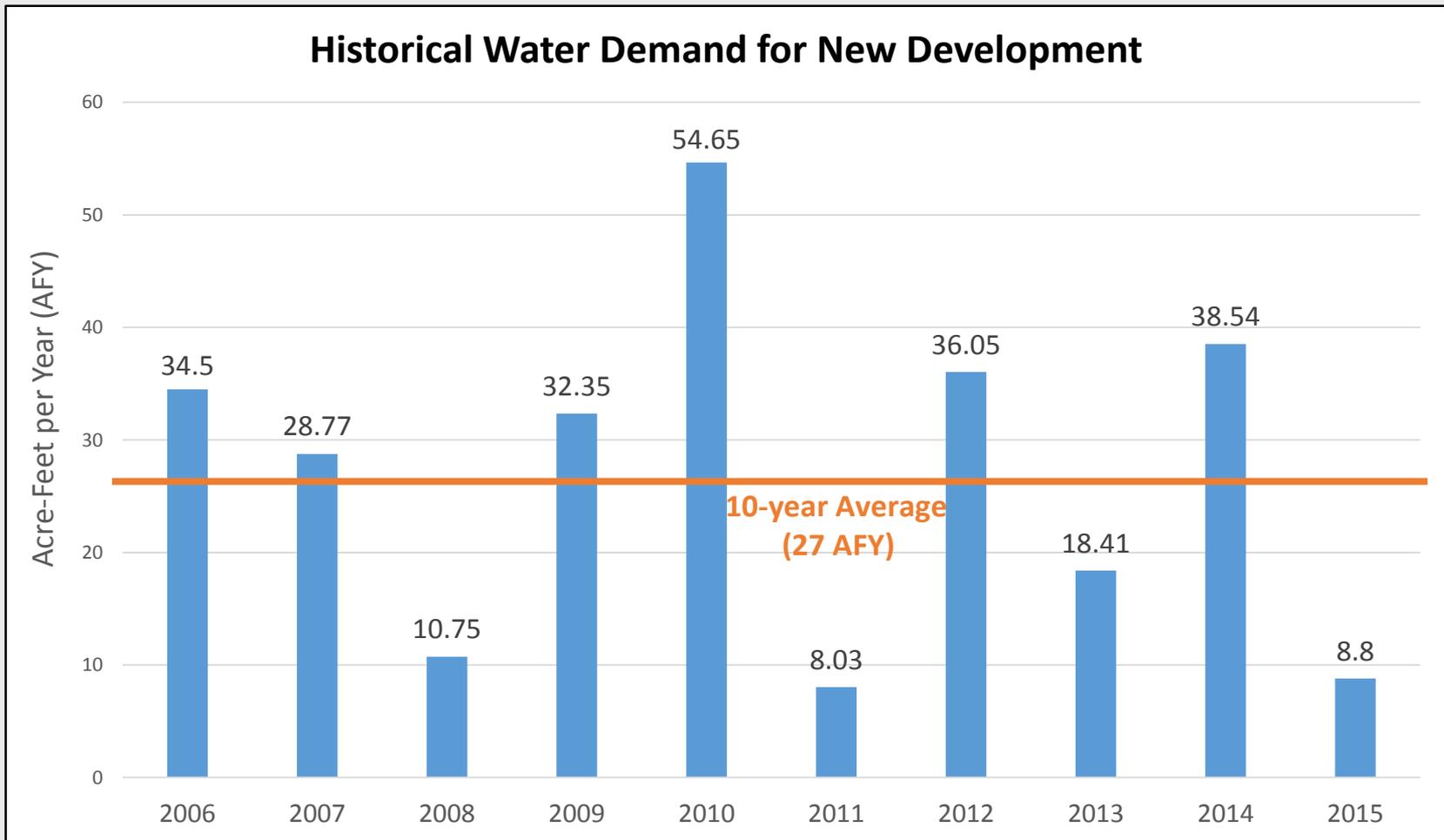


Demand Management – New Development

- High level of public awareness – discussed previously by Council and Planning Commission
- City water demand:
 - 14,600 AFY during normal years
 - 9,500 AFY during current drought condition
- Average annual demand added: 27 AFY (.28%)
- Gross demand in “pipeline”: 179 AFY; only half expected to be built (and over a number of years)



Demand Management – New Development





Demand Management – New Development

Potential Water Demand From All New Development (as of July 31, 2016)			
	Approved Projects	Pending Projects	TOTAL
Water Demand	67.43 AFY	111.76 AFY	179.19 AFY

Demand Management – New Development

- Quantity of savings is well short of projected supply shortfall
- Timing would not be sufficient to address 2017 shortfall
- Likely to have significant economic impacts on the community
- New development would be subject to the same regulations as existing customers