



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: November 17, 2015

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Stage Three Drought Update

RECOMMENDATION:

That Council receive an update on the status of the current drought, drought-response capital projects, and continuing conservation efforts.

DISCUSSION:

On February 11, 2014, Council declared a Stage One Drought Condition and set a goal to reduce customer water use by 20 percent. Council requested that staff provide a monthly status update on the City's water supplies, conservation efforts, and current work efforts. On May 20, 2014, Council declared a Stage Two Drought Condition in response to a third consecutive year of below-average rainfall and the critical need to achieve a 20 percent reduction in water usage. On May 5, 2015, in response to the driest consecutive four-year period on record, Council declared a Stage Three Drought Emergency, increased the community's water conservation target to 25 percent, and adopted additional water use regulations by resolution on May 12, 2015.

This report will cover the following items:

- Water Supply Outlook/Weather Forecast
- Drought Response Capital Projects
- Conservation Efforts

Water Supply Outlook

Rainfall for the last four years has averaged less than half of the long-term average. Consistent with the City's Long Term Water Supply Plan, depleted surface water supplies have been replaced with increased groundwater production and purchases of supplemental water. This strategy has been successful in securing supplies sufficient to meet demand through 2016, assuming there is a 25 percent reduction in customer water use. In order to ensure adequate supplies to meet demand, supply projections

must recognize the potential for the current dry weather pattern to continue. Accordingly, staff's supply projections through 2016 assume no significant deliveries from Gibraltar Reservoir, no additional Lake Cachuma entitlement, and insufficient rainfall in Northern California to allow for dependable supplemental water purchases or State water deliveries. By 2017, the primary remaining potable supply would be groundwater, which has a limited production capacity, and the City's Charles E. Meyer Desalination Plant (Desalination Plant), which is scheduled to be reactivated by fall 2016.

Recent weather forecasts support an increased potential for strong El Niño conditions this winter. Such conditions are often associated with significant rainfall. However, there have also been years with strong El Niño conditions that have produced drier than average years. Given the unpredictable nature of El Niño events, this phenomenon cannot be counted on to improve the City's water supply, and the City is planning for continued dry conditions.

Drought Response Capital Projects

The City successfully completed a seven-day test of the newly rehabilitated Recycled Water Treatment Plant and, with the State's approval, began distributing recycled water on November 2, 2015. All recycled water customers have been notified, letting them know the facility is back online, and restrictions on recycled water use are no longer necessary.

Work continues to move forward on the reactivation of the Desalination Plant. As a recap, the current plant reactivation will produce 3,125 acre feet annually for City water customers, and startup is scheduled for late September 2016, with a contract completion date of October 7, 2016. Negotiations continue with the Montecito Water District on an arrangement to assist them with their current and long-term water needs. In accordance with the MOU initiating negotiations, the goal is to develop a draft agreement by January 2016.

Conservation Efforts

The City's water customers continue to meet and exceed both the City's and the State's conservation targets with extraordinary conservation measures. Under the State's current regulations, adopted in May 2015, mandated water use reductions for urban water suppliers range from 4 to 36 percent, depending on residential per-capita water use. For Santa Barbara, the State-mandated water use reduction is 12 percent below 2013 water usage, based on our summer 2014 residential water use of 79.6 gallons per person per day. However, the severity of the drought's impact on local water supplies requires a citywide 25 percent reduction target to ensure the City has adequate supplies through 2016.

The City's water conservation numbers for October 2015 show a reduction of 28%, compared to 2013 water demands. The community's success at conserving water has been critical to minimizing the need for additional regulations and allowing for greater flexibility if drought conditions continue or worsen.

With the Stage Three Drought Emergency declaration and the need for a 25 percent reduction, the Water Conservation Program has continued its enhanced public information campaign of targeted outreach to specific user types, 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 throughout the City; and
- additional training and workshops.

Revenues

Water revenues for Fiscal Year 2016, which includes August through October revenues, shows revenues are down 10.5% from projected. Given the revenue shortfall, staff has been looking at opportunities to temporarily reduce expenditures without compromising service. A contract to study water rates for Fiscal Year 2017 is tentatively scheduled for Council consideration on November 24. Staff will continue to monitor revenues and update Council on changes.

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APPROVED BY: City Administrator's Office



PUBLIC WORKS DEPARTMENT

WATER RESOURCES DIVISION

STAGE THREE DROUGHT UPDATE

City Council
November 17, 2015

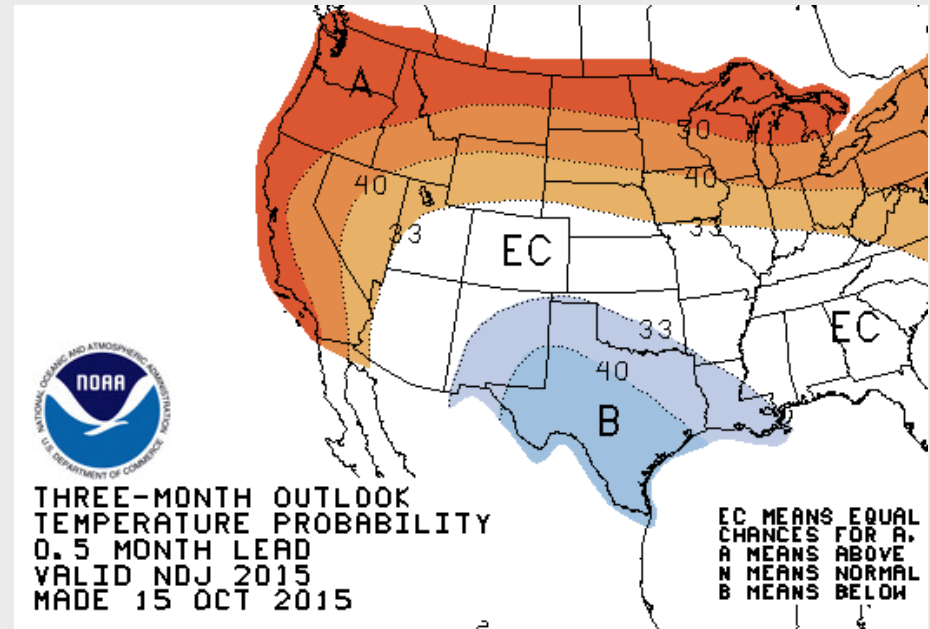
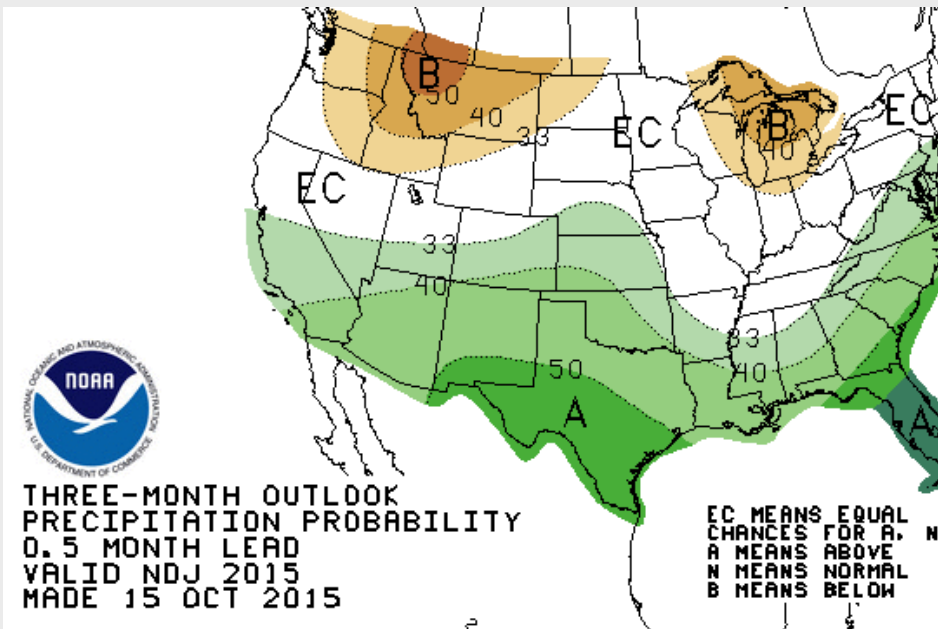


Outline

- Weather Forecast and Rain Totals
- Community Conservation
- Water Supply Strategy
- Lake and Reservoir Operations
- Capital Projects
- Water Budget Impacts
- Water Conservation Program

National Weather Forecast

- Next three months:
 - Above Average Rainfall
 - Above Average Temperatures



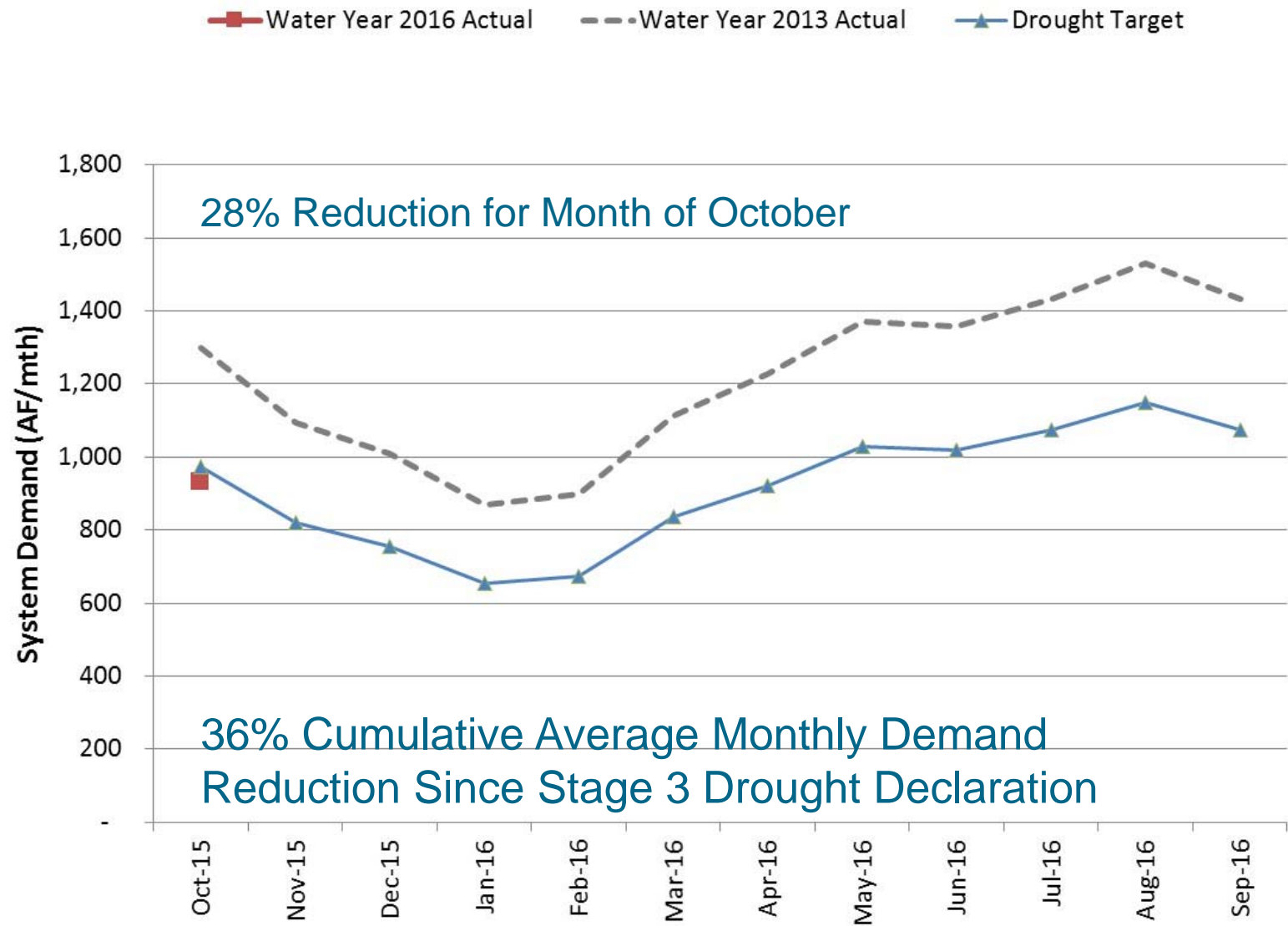


Rain Totals for WY 16

- Rainfall for the Water Year as of 11/16/15:
 - Gibraltar Lake – .67” (32% of Normal)
 - Lake Cachuma – 1.20” (67% of Normal)
 - Santa Barbara – .47” (27% of Normal)



COMMUNITY CONSERVATION



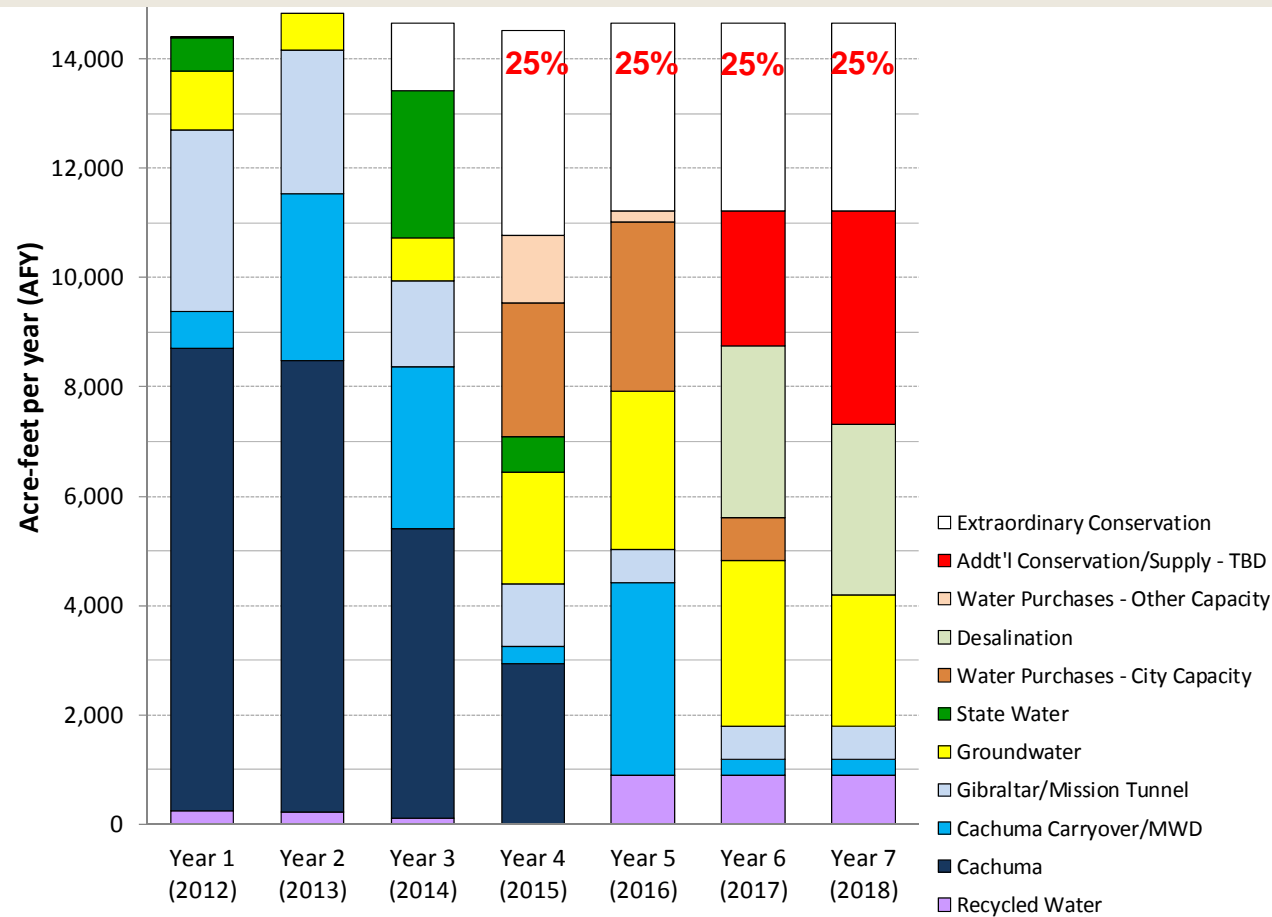


WATER SUPPLY STRATEGY



Current Supply Outlook

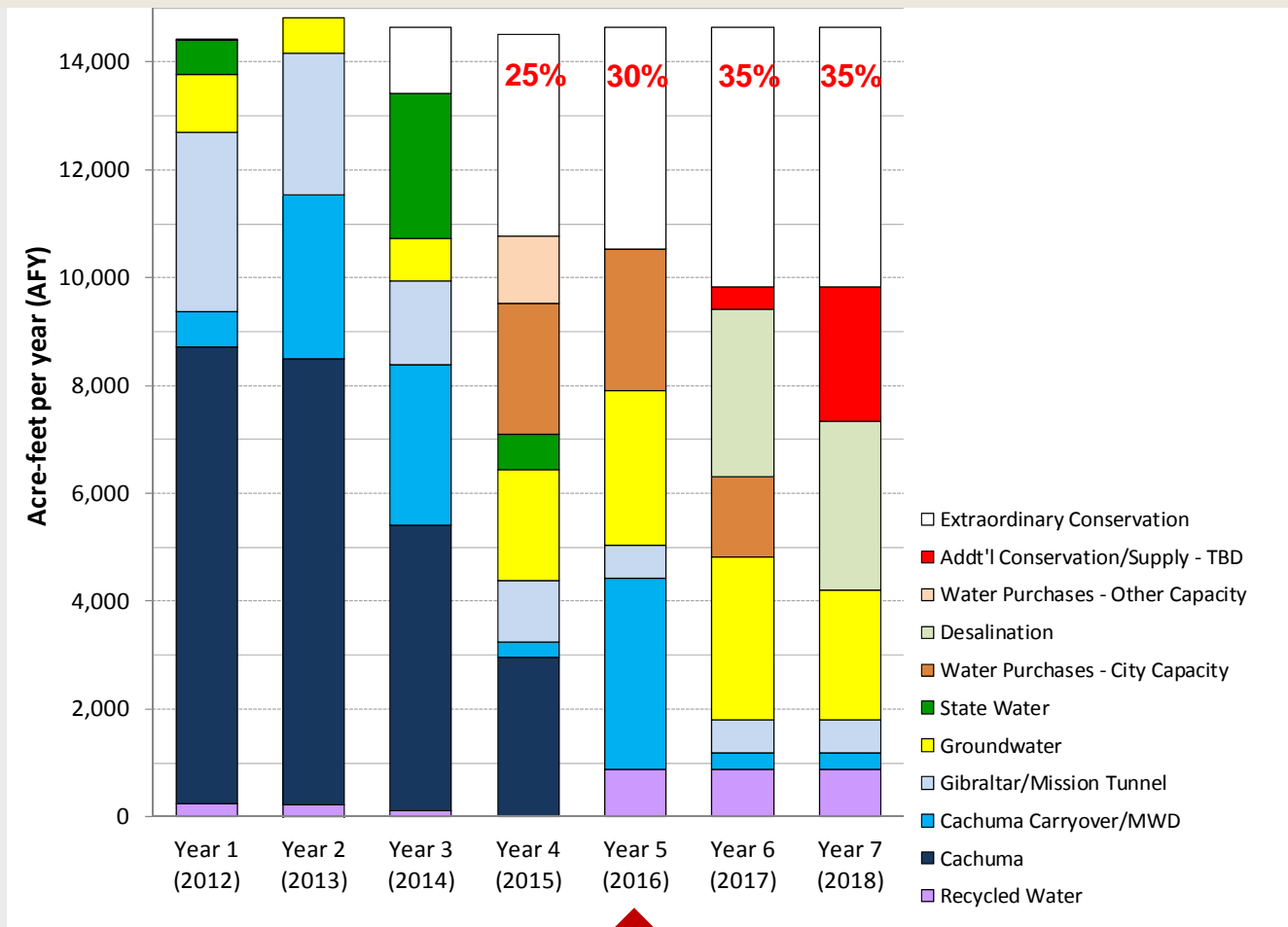
(based on no reservoir inflows, no State Water)





Projected Supply Outlook

(based on no reservoir inflows, no State Water, 35% conservation in May 2016)





Water Supply Planning – Tentative Milestones

- Demand Management
 - Increase Conservation Target
 - *Spring 2016 - New Regulations if necessary*
- Supply Management
 - Supplemental Water Purchases
 - *April 2016 - Timing of Typical Commitment*
 - Desal Expansion Discussion
 - *March 2016 - Rate Noticing*
 - *State Revolving Fund Loan Increase*
 - *May 31, 2016 - IDE proposal expires*



LAKE AND RESERVOIR OPERATIONS

Lake Cachuma

- Capacity as of 11/16/15
 - 30,165 Acre Feet (15.6% of Capacity)
 - ~2,610 Acre Feet - Remaining City Water (after estimated evaporative losses)
- Fish Water Releases – 8 Acre Feet Per Day (AFD)
- Emergency Pump Project
 - ~45 AFD diverted to South Coast



Gibraltar Reservoir

- Capacity as of 11/16/15
 - 408 Acre Feet (7.8% of Capacity)
- Prep for El Nino and Continued Drought Conditions





DROUGHT RESPONSE CAPITAL PROJECTS

Recycled Water System

- Recycled Water Facility
 - Facility is online and distributing recycled water as November 2, 2015
 - Next Step:
 - *Reconcile costs associated with filter design error*



Recycled Water System

- Customer Outreach
 - Letters mailed to each site
 - E-Newsletter with preliminary water quality data
 - Free signage available to user sites
 - *Visit our website or call 564-5460*



This landscape uses
RECYCLED WATER

Recycled water saves drinking water
helping us to conserve during the drought.

SantaBarbaraCA.gov/Water

Groundwater Well Project Highlights

- High School Well
 - Well Head Project out to bid
 - Award anticipated in December 2015
 - Production anticipated by summer 2016
- Hope Well Cleaning
 - Project out to bid
 - Construction anticipated to start in January 2016
 - Additional production anticipated by Spring of 2016



Desal Project Status

- Demo is Complete
- Started and subsequently stopped underground utility work
- Soil Contamination
 - Lab Tests confirmed Hydrocarbon and Lead contamination
 - All underground activity stopped for a minimum of 30 days (County Environmental Health Requirement)
 - Work Plan – Remediation and Cleanup
- Cost & Schedule Impacts – Unknown at this time
- Presented City's draft term sheet to MWD Negotiating Committee on November 3





WATER BUDGET IMPACTS



Water Budget

- Revenues down 10.5% (August – October) - ~\$1.3M
- FY 17 Water Rates
 - November 24 – Council to consider contract award
 - Planning for a Range of Scenarios:
 - *No Expansion of Desal – Drought conditions improve*
 - *Expansion of Desal – Drought conditions persist or worsen*
 - *Water Demand Variability*
 - *MWD - Water Sales Agreement*
 - Council Rate Discussion – February/March 2016



WATER CONSERVATION PROGRAM

It's Fall Planting Season!

- Roots, not shoots
- Shorter days, cooler temperatures
- “Fall Planting” extensions are in effect for landscape rebate program



New Garden Wise TV Episode

- “Lawn Be Gone: What To Do Next”
- Highlights case studies of landscape rebate participants throughout County



New Garden Wise TV Episode

- Garden design ideas from local designer Joan Bolton
- Sweetwater Collaborative Water Wise Home Walking Tour



New Garden Wise TV Episode

- Native plant selection and favorites from Windmill Nursery and Seaside Gardens.
- Can be viewed on YouTube, Channel 18, Channel 20, or Comcast Channel 23.



For more information:

www.SantaBarbaraCA.gov/Water

Call: 564-5460

