



# CITY OF SANTA BARBARA

## COUNCIL AGENDA REPORT

**AGENDA DATE:** March 22, 2016

**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:**

Council declared a Stage One, and subsequently a Stage Two Drought Condition 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 additional water use regulations by Resolution on May 12, 2015.

This drought update 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. In accordance with the City's Long Term Water Supply Plan (LTWSP), 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 continued water conservation of 25 percent or more.

To ensure adequate supplies to meet demand, supply projections must recognize the potential for a continuation of the current dry weather pattern for the local region. Staff

is proposing to increase the water conservation target in spring 2016 to address continued drought conditions. Since declaring the Stage Three Drought Emergency, the community is currently averaging 34 percent conservation. Assuming we can maintain this level of conservation, and factoring in the reactivation of the Desalination Plant (Plant) in fall 2016, the City would have adequate supplies to meet demand through 2017.

Staff has completed an assessment of the scope and schedule for an expansion of the the Plant and the required distribution improvements. The cost for expansion of the Plant from 3,125 acre feet per year (AFY) to 7,500 AFY will be approximately \$45 million and take 18 months to complete, following contract authorization. To delay the decision for expansion by one year, the City needs to procure adequate supplies through 2018. With the recent average rainfall in Northern California, the market for purchasing supplemental water is favorable. Assuming a conservation target of 35 percent and Plant operation at 3,125 AFY, the City is planning to purchase 3,000 AF of imported water to meet demands through 2018. The Fiscal Year 2016 budget includes sufficient appropriation authority established for water purchases to cover the \$3 million cost for supplemental water purchases.

National Oceanic and Atmospheric Administration (NOAA) weather forecasts continue to support a strong El Niño condition through April 2016. Such conditions are often associated with increased rainfall for Southern California. However, so far, rainfall has not materialized in Southern California to a point that would provide any local relief to the current drought. There have only been six strong El Niño events in recorded history. Four of those events have yielded rainfall that was average or above, and two have yielded rainfall below average. Given the unpredictable nature of El Niño events and the unprecedented nature of the current drought situation, this phenomenon cannot be counted on to improve or end the current drought; therefore, the City is planning for continued drought conditions.

#### Drought Response Capital Projects

Work continues to progress on schedule for the reactivation of the Plant. The recent contaminated soils issues are being resolved and the contractor has clear direction moving forward. Off-site work on the treatment units continues to be on schedule, with delivery to the site anticipated in May 2016.

As a recap, the current Plant reactivation will produce 3,125 AFY for City water customers, and startup is anticipated for October 2016.

Negotiations continue with the Montecito Water District on an arrangement to assist them with their current and long-term water needs. At this time, there has been no substantial progress to report.

Conservation Efforts

The City's water conservation numbers for February 2016 show a reduction of 30 percent, compared to 2013 water demands. The cumulative average reduction since the Stage Three Drought declaration is 34 percent.

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 Stage Three Drought Emergency requires a citywide 25 percent reduction to ensure the City has adequate supplies for the 2016 water year. The conservation target is anticipated to be amended in late April 2016, and will likely be increased if current drought conditions persist.

The state-mandated water use reduction for the City is 12 percent below 2013 water usage. The City has been one of the few water providers statewide that has consistently met and exceeded the state's water use reduction targets and mandated conservation standard.

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