



Agenda Item No. _____

File Code No. _____

CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: September 22, 2015

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Stage Three Drought Update

Item 8

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 new 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 (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 for the 2015 and 2016 water years, 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 beyond 2016 assume no significant deliveries from Gibraltar Reservoir, no additional 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), is scheduled to be reactivated by fall 2016.

Recent media reports have discussed an increased potential for strong El Niño conditions in Water Year 2016. 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.

Drought Response Capital Projects

Work at the new Alameda Well is now complete, and the well is back in production at approximately 420 gallons per minute. The new well has a higher production capacity than the previous well, and we are anticipating roughly 480 acre feet per year. Efforts to bring the High School Well back online continue as planned. Construction is nearing completion on the installation of nearly 3,500 feet of water main necessary to bring the raw water to the Ortega Groundwater Treatment Plant. Staff is nearing completion of the final design to the well head improvements; the well is expected to be online by Summer 2016.

The rehabilitation of the City's Recycled Water Treatment Plant (RWT Plant) is anticipated for completion in October 2015. Recycled water customers will continue to be asked to reduce their water usage until the RWT Plant is in service. Staff will be contacting all recycled water customers when the new RWT Plant is officially back online.

On July 21, 2015, Council took the final steps in approving the reactivation of the Desalination Plant. The contractor has been busy planning and designing the necessary efforts needed to bring the plant back online by September 2016. Work on site will begin in September with the demolition and removal of all unnecessary equipment. The current plant reactivation will produce 3,125 acre feet annually for City water customers, which is approximately 30 percent of our current demand. Staff will be providing an update on the status of the Desalination Subsurface Intake and Potable Reuse Feasibility Study under a separate agenda item.

Conservation Efforts

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 for the 2016 water year.

The City's water conservation numbers for July and August 2015 show a reduction of 36 percent and 38 percent respectively, when compared to 2013 water demands. Calendar year 2013 is the state's baseline for comparison and reporting on statewide water conservation efforts. Santa Barbara has been one of the few water agencies statewide that has consistently met and exceeded the state's water use reduction targets and mandated conservation standard. The City finished Fiscal Year 2015 with 26 percent conservation.

With the Stage Three Drought 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 at City facilities; and
- additional training and workshops.

Since declaring a Stage Three Drought Emergency in May, the community has been very responsive, exceeding the 25 percent conservation goal. At this time, it does not appear that any additional water use regulations or development restrictions are necessary for the foreseeable future. Staff will continue to monitor conservation efforts and water supplies and report to Council any changes that may require further water use regulations.

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APPROVED BY: City Administrator's Office