



CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: July 14, 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 because water conservation fell short of meeting the 20 percent target. On May 5, 2015, in response to what has now become the driest four-year period on record, Council declared a Stage Three Drought Emergency, increased the community's water conservation target to 25 percent, and provided direction to staff on final wording of a resolution to adopt Stage Three regulations. This Resolution was adopted on May 12, 2015, as Resolution No. 15-036.

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. However, 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 our groundwater, which has a limited production capacity, and the groundwater basins will have been significantly depleted. Consistent with the LTWSP, the remaining supply option is the reactivation of the City's Charles E. Meyer Desalination Plant (Desalination Plant).

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 water supply situation.

Drought Response Capital Projects

Staff continues to work on drought-related capital projects, including completion of the new Alameda Park Well, which should be in service by fall 2015. Preliminary test results suggest that the well will have a greater production rate than originally predicted. Efforts are also continuing to put the High School Well into service before spring 2016.

The rehabilitation of the City's Recycled Water Treatment Plant (RWT Plant) has suffered delays related to the membrane design. Completion of this project is now anticipated for fall 2015. Conservative estimates were used for water supply planning related to the RWT Plant coming online, so the delayed start will not cause a significant impact to the City's water supplies. Recycled water customers will continue to be asked to reduce their water usage by the targeted 25 percent until the RWT Plant is in service. Staff is working closely with the project's contractor and design firm to resolve the design issues.

Staff has completed a year-long process of preliminary design and solicitation of proposals to reactivate and operate the Desalination Plant. In March 2015, staff conducted interviews with potential Design/Build/Operate (DBO) contractors and subsequently completed negotiations with the top firm, IDE/Kiewit. On June 16, 2015, Council authorized the award of the design portion of the DBO contract, with award of the build and operate portions held pending state approval of the state Revolving Fund (SRF) loan. The state has completed the SRF loan, and award of the build and operate portions of the DBO contract is now being recommended.

Conservation Efforts

The City's most recent water conservation numbers for June 2015 show a 40 percent reduction in water use, compared to 2013 water demands, and an overall average monthly demand reduction of 26 percent. The 2013 reference 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.

Under the state's current regulations, adopted in May 2015, mandated water use reductions for urban water suppliers range from four to 36 percent, depending on residential per-capita water use. For Santa Barbara, the state-mandated water use reduction is 12 percent, which is a result of the 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.

With the Stage Three Drought declaration and the need for a 25 percent reduction, the Water Conservation Outreach 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.

Stage Three water rates took effect on July 1, 2015 and will appear on water bills mailed during August 2015. During the coming months, staff will monitor conservation efforts and consider possible recommendations for further water use regulations or development of restrictions in fall 2015, if necessary.

PREPARED BY: Joshua Haggmark, Water Resources Manager/CT/mh

SUBMITTED BY: Rebecca J. Bjork, Public Works Director

APPROVED BY: City Administrator's Office