



DRAFT

CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: March 29, 2022

TO: Mayor and Councilmembers

FROM: Water Resources Division, Public Works Department

SUBJECT: Water Supply Update

RECOMMENDATION: That Council:

- A. Receive a water supply update; and
- B. Approve an increase in appropriations in the Water Operating Fund in the amount of \$2,000,000, funded from Water Operating Fund Reserves, for supplemental water purchases through the Central Coast Water Authority.

DISCUSSION:

In January 2022 staff provided a water supply update to Council based on an updated water supply planning assessment through Water Year (WY) 2024 (the 12-month period ending in September 2024). At that time, based on conservative assumptions regarding rainfall during the current winter, staff found that even under drought conditions, the City's water demands can be met for the next two years (through WY 2023) using a combination of carryover water from Lake Cachuma, Mission Tunnel infiltration, desalination, groundwater pumping, and recycled water. Staff recommended monitoring rainfall amounts during the winter months of December through March and coming back with an update in the spring of 2022.

Updates to the City's water supply planning strategy are conservative. The recent analysis assumed hydrological conditions similar to actual conditions during the most recent drought. Under this scenario, there is little to no rainfall for three years, resulting in no inflows locally into both Lake Cachuma and Gibraltar Reservoir. It is also assumed that there are drought conditions statewide, which reduce the State Water Project (SWP) water allocation to zero percent in WY 2022 and 15 percent in WYs 2023 and 2024. This conservative planning approach allows staff to evaluate if the City has sufficient water to meet demands under three additional years of drought. To date, rainfall this water year both locally and statewide have been mixed. November, January, and February have seen nearly no precipitation. However, a storm in late October 2021 and a series of storms in December 2021 brought nearly 16 inches of rain to the City (at Gibraltar Reservoir). Sixteen inches of rain is 59 percent of our average annual rainfall.

As a result of the 2021 rains, Gibraltar Reservoir is currently 59 percent full with over 2,700 acre-feet (AF) of water stored, allowing staff to begin diverting water from Gibraltar for City use. Statewide, storms refilled important northern California reservoirs throughout the SWP

to volumes high enough for the California Department of Water Resources (DWR) to issue a 15 percent allocation on the SWP for 2022. A 15 percent allocation equates to 495 AF of water for the City. As a result of these storms, the City's water supply outlook has improved from the original analysis, which did not include any water available for City use from Gibraltar Reservoir or the SWP in WY 2022.

Conversely, the last two months have been warm and dry with almost zero precipitation, and the National Oceanic and Atmospheric Association's National Weather Service is forecasting below average precipitation and average temperatures for March through May 2022. Santa Barbara typically receives the majority of its rainfall between December and March. The Central Coast Water Authority (CCWA), the City's contractor for SWP water, recently suggested that if the dry weather continues statewide, DWR might reduce the 2022 SWP allocation from 15 to 10 percent. This would reduce the City's allocation of SWP water from 495 AF to 330 AF for the year.

In addition to the unanticipated Gibraltar water and SWP water described above, the City is consistently operating the Charles E. Meyer Desalination Plant, which can produce approximately one-third of the City's annual water demands. The City also has over 23,000 AF of water stored in Lake Cachuma. The water stored in Cachuma alone can meet the City's water demands for the next two years. Additionally, current estimates are that there is approximately 10,000 AF and 3,800 AF of water available in Storage Unit No. 1 and the Foothill Groundwater Basin, respectively. Overall, the City is currently in a relatively secure water supply position. However, prudent planning necessitates continual preparation for more dry years ahead.

To ensure the City's water supplies can be stretched through several more dry years, staff is taking the following actions:

- Commencing deliveries of SWP water currently stored in San Luis Reservoir to Lake Cachuma for City use in spring 2022.
- Commencing groundwater pumping from the Storage Unit No. 1 Groundwater Basin in the summer of 2022.
- Constructing a pipeline to convey water pumped from the Alameda Well in Storage Unit No. 1 to the Ortega Groundwater Treatment Plant for treatment, so groundwater production from that well can commence in the summer of 2023 if needed.

For additional water supplies, staff is working with CCWA to secure up to 2,000 AF of supplemental water purchases through the SWP. This water can be stored in San Luis Reservoir for use by the City as needed into the next water year. No evaporation is applied to water stored in San Luis Reservoir. If next winter turns out to be wet, the water can be used to pay off the City's water debt of 2,000 AF acquired because of water exchanges made to stretch the City's water supplies in 2016. Initial investigations found that water is currently selling for \$1,200 to 1,400 per AF.

Water conservation is another useful tool for stretching limited water supplies. Santa Barbara water customers have truly invested in a "conservation as a way of life" approach to water use in our community. The City's current water demands are 25 percent less than 2013 baseline water demands (the previous "pre-drought" baseline set by the state), resulting in

approximately 3,400 AF of annual savings compared to 2013. This commendable level of water conservation, in conjunction with operation of the desal plant, has allowed the City to build up water stored in Lake Cachuma to current levels, leaving the City in a relatively secure water supply position, despite ongoing dry conditions.

Statewide, Governor Newsome declared a Drought Emergency in October 2021, asking Californians to reduce their water use by 15 percent compared to 2020 baseline usage. The declaration did not require specific regulations for water agencies, and the new 2020 baseline was designed to target communities whose water demand had rebounded significantly after the average and above-average rainfall in the winters of 2017 and 2019. Santa Barbara has not seen such a significant rebound in water use. A 15 percent reduction compared to 2020 water use in Santa Barbara is equivalent to a 37 percent reduction compared to 2013 water use. While the City did achieve levels of conservation as high as 43 percent in 2017, local regulations included a mandatory lawn-watering ban and other restrictions on water use. A “one size fits all” statewide mandate on water conservation unnecessarily burdens communities like Santa Barbara who excelled at conserving water throughout this extended drought.

Staff is monitoring potential new drought regulations and requirements from the state, and providing comments as the opportunity arises regarding the overly burdensome nature of a “one size fits all approach.” Staff anticipates the state will release additional requirements for water agencies later in the spring. At that time, staff will return to Water Commission and Council to discuss any mandated regulations and if a change to the City’s current Stage One Water Supply condition, which asks for voluntary 15 percent conservation compared to the 2013 baseline, is required and/or warranted.

BUDGET/FINANCIAL INFORMATION:

With the proposed appropriations, there are sufficient appropriations in the Water Operating Fund to cover the cost of anticipated supplemental water purchases through the Central Coast Water Authority, and Water Operating Fund reserves remain above Council policy.

WATER COMMISSION RECOMMENDATION:

This item was presented to the Water Commission at its meeting on March 17, 2022, and the Commission voted **X-X** in support of staff’s recommendation.

A copy of the CCWA Participation Agreement may be requested from the Public Works Department for public review by contacting PWInfo@SantaBarbaraCA.gov.

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SUBMITTED BY: Clifford M. Maurer, P.E, Public Works Director

APPROVED BY: City Administrator’s Office