

**MONTECITO WATER DISTRICT  
MEMORANDUM**

**SECTION: 5-C**

**DATE: OCTOBER 25, 2022**

**TO: BOARD OF DIRECTORS**

**FROM: GENERAL MANAGER**

**SUBJECT: QUARTERLY DROUGHT AND WATER SUPPLY UPDATE**

---

**RECOMMENDATION:**

Information only

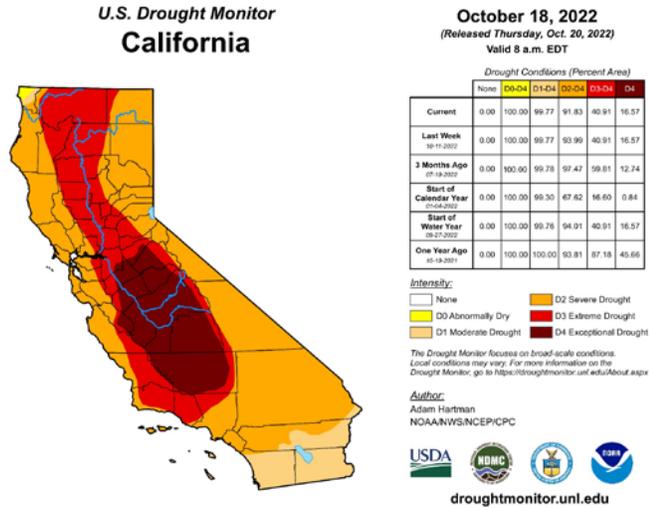
**DISCUSSION:**

*Overview*

There has been minimal change in the status of the ongoing drought and the District's water supply outlook since the quarterly update was provided in August, 2022. Over 92% of the State remains in severe or worse drought conditions, with Santa Barbara County experiencing primarily extreme drought conditions according to the US Drought Monitor. Local and regional water supplies continue to diminish and supplemental water is limited. Based on current projections, which assume drought conditions continue, the District's 3-year water supply outlook is satisfactory. This outlook is quite improved from many other communities across the State due to extensive planning performed over the past six years aimed at lessening the impact of future droughts on water supplies. This outlook incorporates the use of the District's reserved drought supplies, including water stored in Semitropic and the water purchase arrangement with HOMER in 2023 and/or 2024. Water supplies stored in Lake Cachuma serving as a supply buffer to accommodate fluctuations in customer water use and/or water supply availability become dangerously low in 2024. Additionally, a severe water shortage is projected in 2025, if conditions do not improve. Compounding this problem is the increase in customer water use since January 2021, consistently about 20% above planned levels. Water supply conditions will worsen if customer water use is not realigned with reduced water supply availability. In response to increased water use, the District has increased its public outreach with the hope of achieving the needed voluntary conservation. Should the response remain insufficient, the District will consider other means of achieving a reduction in water use, including financial methods.

## Drought Update

As of October 18, 2022, the US Drought Monitor indicates continuing drought conditions statewide, with over 92% of the State experiencing ‘severe’ or worse drought conditions and a majority of Santa Barbara County experiencing ‘extreme’ drought. Local conditions remain dry with Santa Barbara County end Water Year 2022 having only received 64% of normal rainfall, marking the third consecutive year of below average rainfall. The National Oceanic and Atmospheric Administration indicates that La Nina conditions are ongoing and are favored to continue through the end of 2022. Warmer and drier weather patterns are commonly association with La Nina conditions in the southwest, including California.



## Update on Water Sources

The **Cachuma Project**, a critical local water supply for the District is currently at 33% of full storage capacity. This source has historically supplied about 40% of the District’s annual water supply. The District’s full Cachuma Project entitlement is 2,651-acre feet (AF). The Cachuma Project allocation for Water Year (WY) 2022, which ended September 30, 2022, was 70% or 1,856 AF. On September 30, 2022, the United States Bureau of Reclamation issued a 0% allocation for WY2023, which began on October 1, 2022. As a result, the District plans to import reserved drought supplies in 2023 and 2024. The District’s 3-year water supply outlook projects the drought continuing and, as a result, a 0% Cachuma Project allocation through WY2025. As of October 1, 2022, the District has 2,219 AF of water stored in Lake Cachuma.

**Jameson Lake**, another critical local water supply for the District, is currently at 56% of the current full storage capacity. Deliveries are reduced to about 600 AF per year consistent with the District’s 2020 modified rule curve for the reservoir. Jameson Lake is a District owned and operated facility and serves as a longer-term drought supply with reduced deliveries available over an extended period. Doulton Tunnel intrusion continues to slowly decline and is currently producing between 15 to 20 AF per month. The District’s 3-year water supply outlook projects drought continuing and only minimal inflow to the lake through WY2025. As of October 1, 2022, the District has 2,736 AF of water stored in Jameson Lake.

**Groundwater** serves as an important drought supply for the District. During average or wetter conditions, the District rests its wells, allowing the groundwater basin to recover. During below average or dry periods, the District withdraws groundwater from the basin. The District has 6

potable and 6 non-potable active groundwater wells capable of pumping a combined total of between 600-700 AF per year. Currently groundwater production is about 50 AF per month. Groundwater levels are declining due to consecutive years of below average rainfall and are approaching the historic local level reached in 2016. The District's 3-year water supply outlook projects groundwater to supply between 400-600 AF through 2025.

The **State Water Project** (SWP) is a supplemental water source supplying water from northern California to help lessening the long-term impacts of drought. The District's full Table A entitlement is 3,300 AF per year, which includes a 300 AF drought buffer. Due to ongoing drought conditions statewide, the Department of Water Resources is anticipating a 0% allocation for 2023, this being the 3<sup>rd</sup> consecutive year of a 5% or less allocation. Due to low SWP reservoir levels, this allocation is not anticipated to increase in 2023. As of October 1, 2022, the District has 154 AF of water available in SWP San Luis Reservoir. Because SWP supplies are limited, supplemental water availability is also limited. The District continues to pursue supplemental water acquisition through the Central Coast Water Authority's (CCWA) 2022 Supplemental Water Purchase Program and plans to do so again in 2023. In addition, the District is pursuing supplemental water acquisitions using its own resources. The supplemental water purchase opportunities identified in 2022 offer only a small volume and are at high cost.

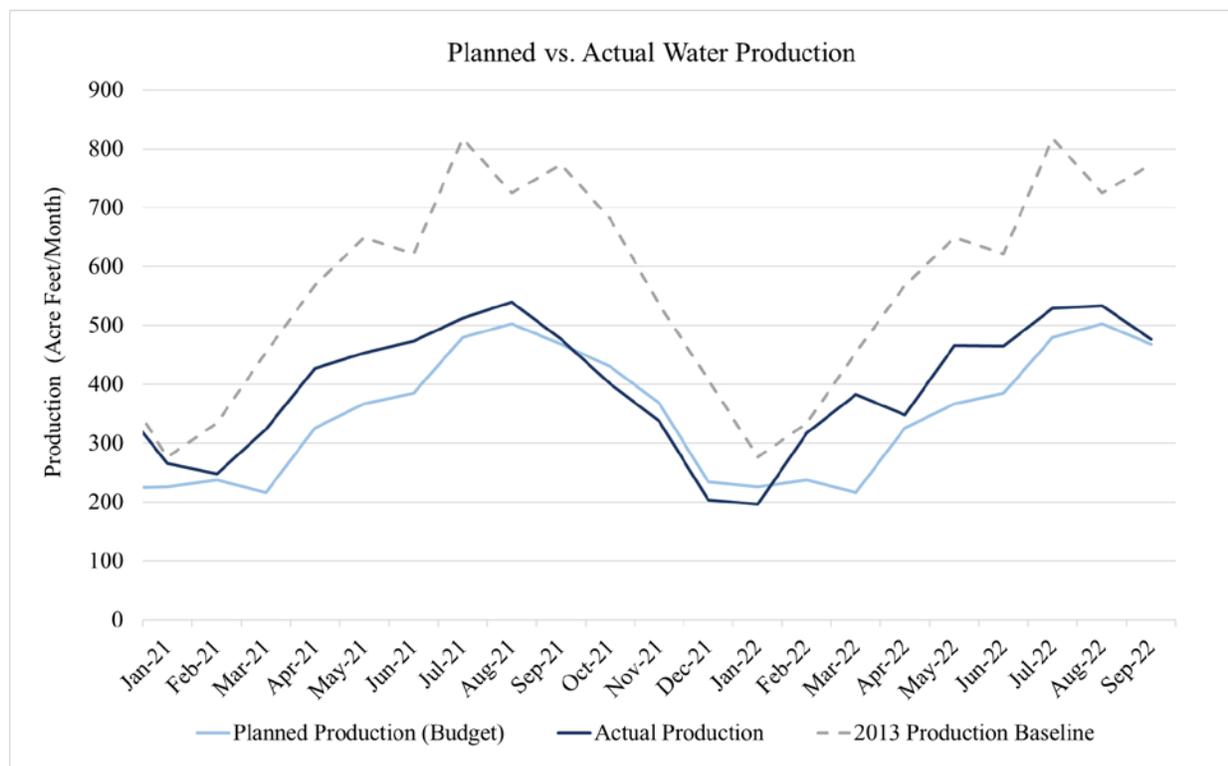
**Desalination** deliveries began in January 2022, with the District receiving 117.4 AF of water per month from the City of Santa Barbara, in accordance with the September 2020 Water Supply Agreement. These deliveries are made possible by the City's operation of its desalination facility. This local rainfall independent water supply is nearly 100% reliable and serves as a baseline supply for the District, helping to mitigate the impact of ongoing and future regulatory, environmental and climatic challenges affecting the District's other water sources. The District's 3-year water supply outlook projects regular monthly deliveries of 117.4 AF ongoing.

The District has several sources of **reserved drought supplies** available for use, including water stored in the **Semitropic Groundwater Banking and Exchange Program** and an option agreement to purchase supplemental water from **HOMER LLC**. The District participates in the Semitropic Groundwater Banking and Exchange Program. During average or wet conditions, the District can store surplus water in a groundwater basin for future use during below average or dry conditions. Participation in this program provides a guaranteed right to extract up to 1,500 AF per year of District stored water and store up to 4,500 AF at any time. The District currently has 1,800 AF of water stored in this banking program. Additionally, the District has a secured option to purchase up to 2,000-acre feet of water in 2022 and/or 2023 from an agricultural operation (HOMER LLC) located in central California. This option provides a guaranteed source of supplemental water during the ongoing severe drought conditions when supplemental water is extremely limited. The District's 3-year water supply outlook projects a need for 2,000 AF of imported water in 2023 and a similar amount in 2024. These reserve supplies will likely be utilized in 2023 and/or 2024 should dry conditions continue.

### Customer Water Use (Demand)

Customer water use remains elevated despite District efforts to curtail water use over the past 15 months. Between January and September 2022, water use (sales) averages about 24% over budget and 13% since July 2021. Water use above budget is occurring across most customer classes with the most significant variance occurring within the residential customer class. The reason(s) for the elevated use remains uncertain but is thought to be attributed to consecutive year of below average rainfall, a historic dry first quarter of 2022, and/or private well use decreasing due to declining groundwater levels.

In July 2021, following a year of water use trending an average 25% over budget, the District established a 20% water use reduction goal to realign water use with budget. As a whole, progress achieving this reduction has been inadequate. Increased water use during drought periods more quickly depletes the District's limited available water supply increasing the potential for a more near-term water shortage. A reduction in water use is required to align consumption with planned use (or budget) to ensure water supply availability in future years. The lack of effectiveness of the District's actions to achieve its water use reduction goal using voluntary conservation actions warrants the District's consideration of other means of reducing water use to improve its water supply outlook.



The District continues to place particular emphasis on conservation outreach through messaging and conservation visits to help support a reduction in water use.

In August 2022, the District commenced a *Find and Fix a Leak* initiative with the goal of increasing regular manual meter reading by customers to track water usage and to identify the leaky faucet icon on water meters. A targeted mailing was sent to over 600 customers with a potential leak on their property. This initiative is ongoing until the District's smart meter program is complete in late 2022 or early 2023.

The District is developing a Water Use Efficiency Plan which will serve as long term plan targeting permanent changes in the way customers use water, consistent with the State's goal of *Making Conservation a Way of Life*. The Plan will include a variety of recommended actions to encourage and help achieve a permanent long-term reduction in water use. Ahead of Plan completion, which is expected by the end of 2022, the District is rolling out a Pilot Conservation Program that involves customer rebates for specific water conservation related actions that are easily implemented by customers and reduce water use in the near term. This includes rebates for toilet and appliance replacements, mulch installation, landscape conversions, and others. These rebates are anticipated to be available within the next 30 days.

See the public information update, included under Item 5-I on the October 25, 2022 Board meeting agenda for more information on the enhanced messaging currently being implemented.

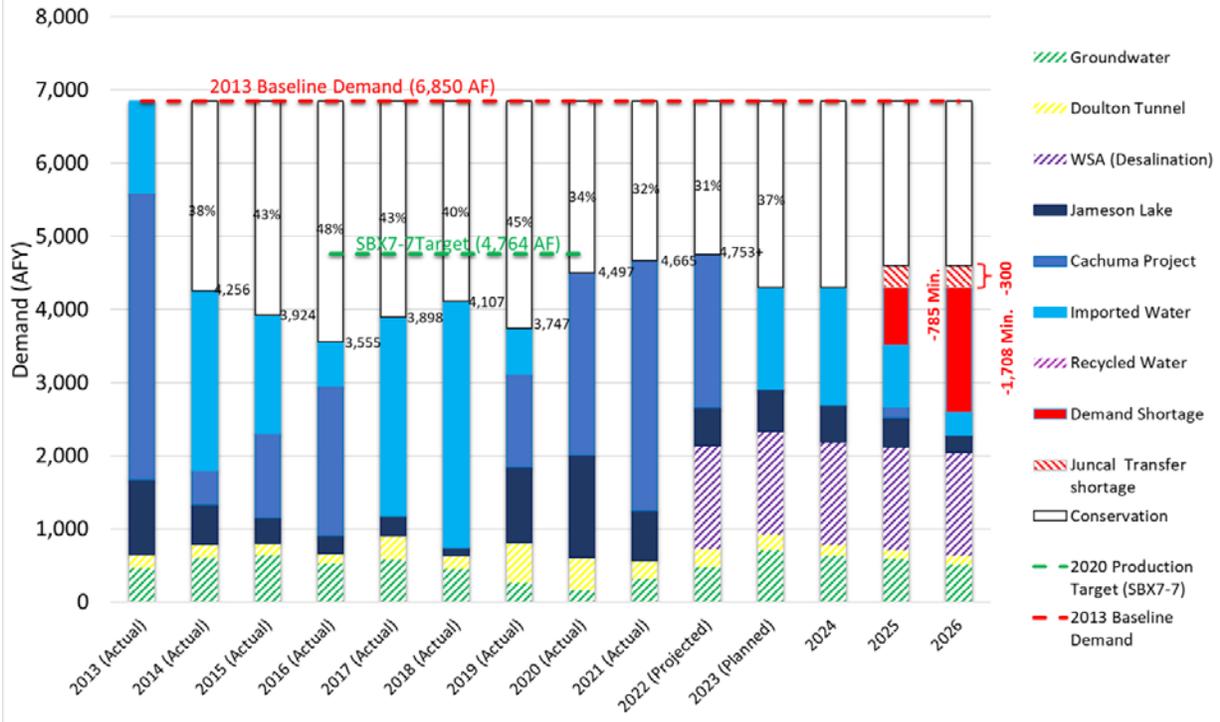
#### *Water Supply Outlook*

Based on available information, including projected dry conditions through 2024, the District's 3-year water supply projection indicates a need for about 2,000 AF of supplemental water in 2023 and potentially a similar amount in 2024 to meet projected customer demand. Near term enhanced demand management is required to reduce current water use by about 20% and realign water use with budget.

Sources of water supply used to meet customer demands through 2024 include the Water Supply Agreement with the City of Santa Barbara (desalination), reserved drought supplies, Cachuma Project, Jameson Lake, and groundwater. The sources of reserved drought supplies include the purchase of supplemental water secured from HOMER LLC, and banked water stored in the Semitropic Water Storage District Groundwater Banking and Exchange Program.

The District continuously evaluates water supply conditions and the need for additional supplement water and/or demand-management measures to ensure water supply availability over a three-year planning period and beyond.

# Water Supply Outlook



## ATTACHMENTS

1. Quarterly Drought and Water Supply Update Presentation