



DATE: May 25, 2021

CATEGORY: Public Hearing

DEPT.: Public Works

TITLE: **2020 Urban Water Management Plan and Water Shortage Contingency Plan**

RECOMMENDATION

Hold a public hearing to accept and consider public comments on the: (1) Draft 2020 Urban Water Management Plan; and (2) Water Shortage Contingency Plan (as required by California Water Code Section 10642).

BACKGROUND

The California Water Code requires urban water suppliers to prepare an Urban Water Management Plan (UWMP) to analyze available water supply during normal and dry years, compared to current and projected water demand. UWMP updates are required every five years. The City of Mountain View's last UWMP was adopted in 2016, and submittal of the 2020 UWMP is due to the California Department of Water Resources by July 1 in order to maintain eligibility for State water grant funding.

The UWMP is a link between land use planning and water supply planning, developed to evaluate if sufficient water is available to meet the needs of Mountain View's existing and future water customers. This UWMP update also includes an update to a Water Shortage Contingency Plan as required by State law. In preparing this UWMP update, staff worked collaboratively with the City's wholesale water suppliers to exchange necessary information. Notice of the preparation and adoption process was posted in local newspapers and emailed to key neighborhood and business liaisons, local water agencies, and the County of Santa Clara.

ANALYSIS

Mountain View's 2020 UWMP provides an analysis of historical, current, and projected water supply and demand. The 2020 UWMP also includes details about the City's climate, service area, potable water supply, recycled water program, water conservation program, supply reliability during normal and drought years, and actions to be taken in

the event of a water shortage or a catastrophic supply interruption. A summary of each item discussed in the UWMP is provided in the Executive Summary (Attachment 1). The complete document is posted online at mountainview.gov/uwmp.

Water Supply and Demand

Mountain View’s municipal water system serves the majority of businesses and residents within the City limits. A small number of customers are served by the California Water Service Company. Future water demand projections for the water service area were developed based on the approved General Plan and affiliated Precise Plans, over a planning horizon of 25 years. Consistent with the City’s adopted land use policies, collective growth is estimated to reach 116,900 residents and 126,100 jobs by 2045 – a 47% and 28% increase from the current levels, respectively (Figure 1).

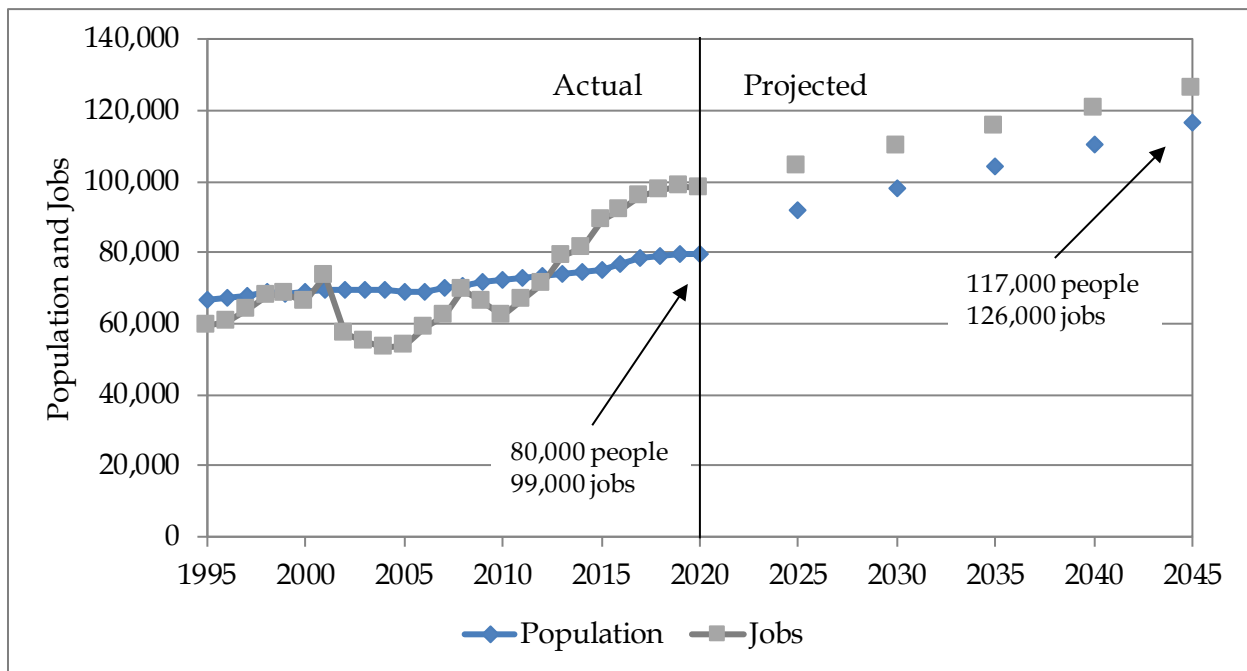


Figure 1: Water Service Area Population and Employment

Mountain View purchases the majority of the City’s drinking water from the San Francisco Public Utilities Commission (SFPUC), sourced primarily from the Tuolumne River and captured in the Hetch Hetchy Reservoir in Yosemite National Park. Drinking water is also purchased from the Santa Clara Valley Water District (Valley Water) and pumped from local groundwater wells. Recycled water from the Regional Water Quality Control Plant located in the City of Palo Alto is used to meet irrigation and toilet flushing demands currently in the North Bayshore Area. Mountain View’s water demand is

projected to increase by 35% over the next 25 years, assuming all growth envisioned in the General Plan is completed within this horizon (Figure 2).

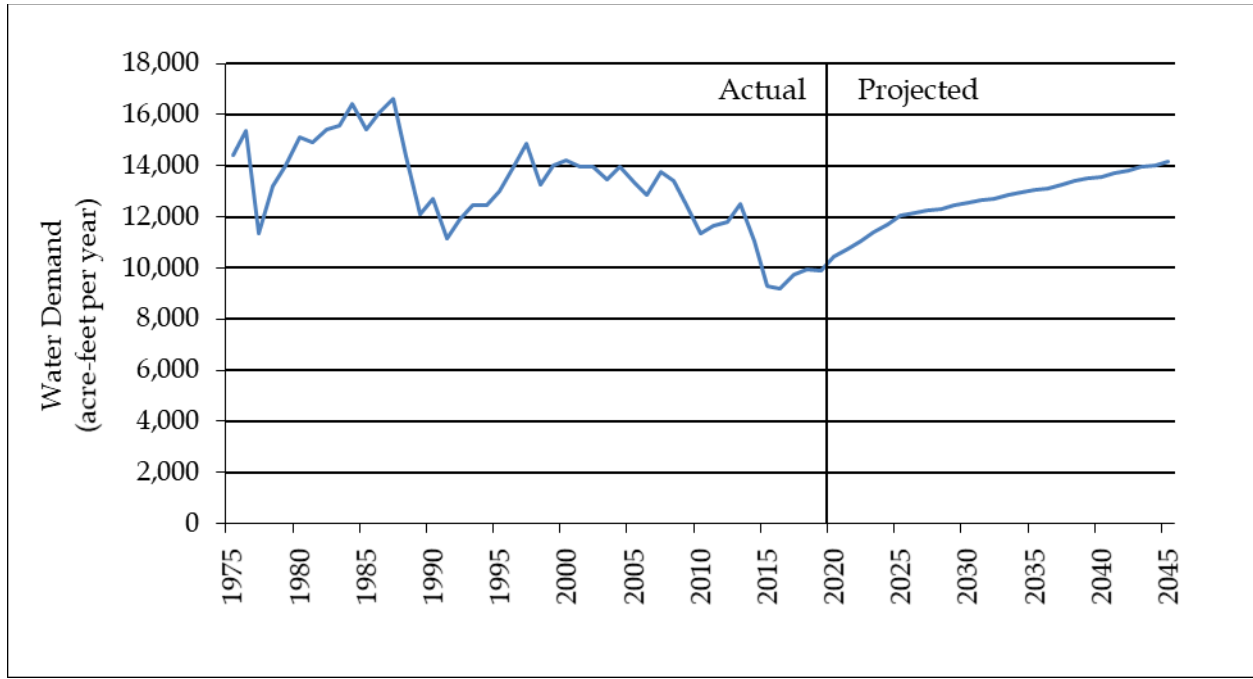


Figure 2: Historical and Projected Water Demand

The percentage of each supply used to meet Mountain View’s water demand changes year to year based on many factors, such as supply availability and the magnitude and geographical distribution of customer demand. Current water use is comprised of 84% SFPUC, 10% Valley Water, 4% recycled water, and 2% groundwater. For conservative planning purposes, this UWMP assumes demand increases will be met using SFPUC water; however, the City maintains flexibility to allow for the use of all water supplies, as needed. Figure 3 shows the City’s historical and projected water supply production by source.

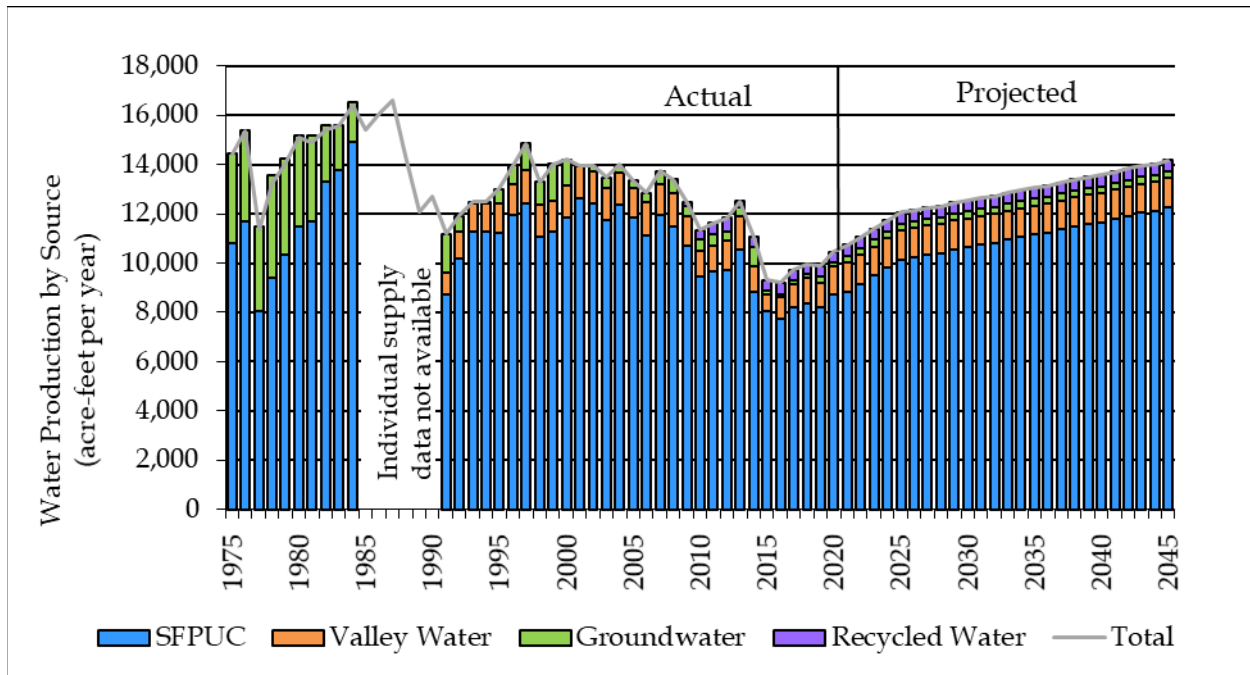


Figure 3: Water Production by Source

Due to the conservative planning approach, the UWMP also assumes that the quantity of recycled water used will not increase over current use. Mountain View continues to work with the Regional Water Quality Control Plant to improve recycled water quality and is updating the City's Recycled Water Feasibility Study to evaluate system expansion options. Once the Feasibility Study is completed and commitments are made for future investments in recycled water infrastructure, a future UWMP could assume increased use of this resource.

Water Supply Reliability

One major component of a UWMP is the water service reliability assessment, which evaluates the availability of Mountain View's water supplies during normal and dry years. Several new considerations have arisen since the City's previous UWMP update, most notably the State Water Quality Control Board's adoption of the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary*. This plan establishes water quality objectives to maintain the health of the Bay Delta ecosystem. One main component of the Bay Delta Plan includes increasing water flows in tributaries of the San Joaquin River, including the Tuolumne River. Several agencies are challenging the Bay Delta Plan, and the State Board is negotiating with water rights holders to find a middle ground. At this time, the final outcome of the Bay Delta Plan remains uncertain.

In preparation for this UWMP update, the SFPUC has evaluated the SFPUC’s supply availability through 2045 and the ability to meet systemwide demand through 2045. The SFPUC projects that implementation of the Bay Delta Plan will result in systemwide water shortages during dry years. Impacts to Mountain View’s SFPUC supply are estimated between a 36% to 54% reduction, with higher supply shortfalls over time. To address the projected shortfalls and meet the SFPUC’s level of service goals, the SFPUC is evaluating alternative supply options such as storage expansion, water reuse (potable and nonpotable), transfers, and desalination.

Based on reliability information provided by both the SFPUC and Valley Water, Mountain View expects to be able to meet projected water demand during all normal years through 2045, but projects cumulative dry-year supply shortfalls of 20%. Reductions to the City’s SFPUC supply would be replaced by increasing groundwater production and implementing customer demand reduction measures. The City is collaborating with Valley Water on Valley Water’s upcoming Groundwater Management Plan Update to be completed by the end of 2021. Figure 4 shows the estimated supply volumes Mountain View will use to meet future demand during normal years, single dry years and five-year extended droughts beginning in 2025, 2030, 2035, 2040, and 2045.

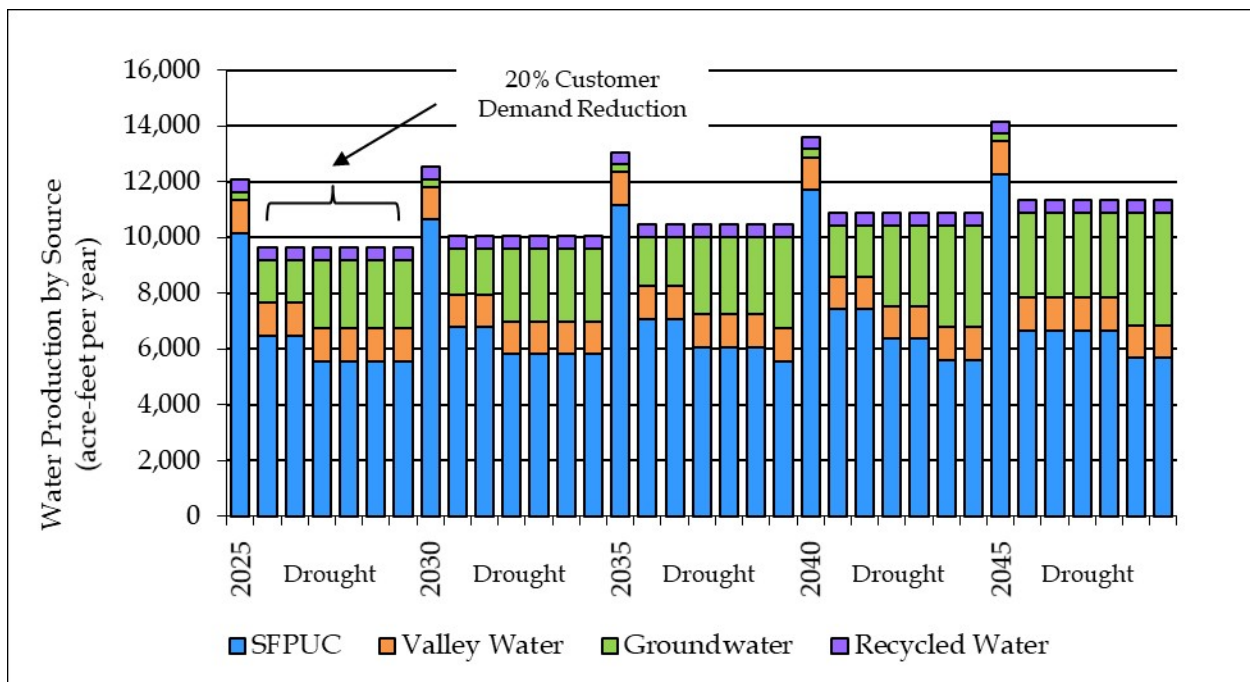


Figure 4: Water Shortage Supply Production

Water Shortage Contingency Plan

Mountain View's Water Shortage Contingency Plan (Chapter 8 of the UWMP) serves as a flexible framework of planned response measures to address water supply shortages. The Plan describes demand reduction strategies to meet various stages of shortages, including up to 10%, 11% to 25%, 26% to 40%, and greater than 40%. Each stage includes a set of actions that become progressively more stringent as the shortage condition escalates. All of the stages are designed to provide adequate water to protect public health and safety and satisfy the City's fire protection needs.

Mountain View most recently implemented the City's Water Shortage Contingency Plan between 2014 and 2017 in response to Statewide drought conditions. At the peak of the recent drought, Mountain View achieved a 29% demand reduction by limiting irrigation to two days per week, as prescribed by Stage 2 of the City's Water Shortage Plan. No modifications have been made to the Water Shortage Plan as part of this UWMP update, but new State law requires a public hearing be held specifically on the Water Shortage Plan, in addition to the UWMP.

Next Steps

Following this public hearing, staff will return to the City Council for adoption of the resolutions approving the 2020 UWMP and Water Shortage Contingency Plan on June 8, 2021. Staff will submit the final report to the California Department of Water Resources, the State Library, and the County of Santa Clara. The adopted 2020 UWMP will be also be posted on the City's website.

FISCAL IMPACT – None.

CONCLUSION

Mountain View updates the City's UWMP every five years to evaluate the City's ability to meet the City's water needs over the next 25 years. This UWMP considers water demand associated with current customers, as well as new customers arising from implementation of the General Plan and Precise Plans. This growth, combined with continued rebound from recent drought and economic recession, is expected to increase water use by 35% between 2020 and 2045. Mountain View will meet these water needs through continued implementation of water conservation measures and use of the City's four water supplies: SFPUC, Valley Water, groundwater, and recycled water. Mountain View continues to collaborate with wholesale suppliers and other regional partners to sustainably manage water supplies and meet the City's water needs now and in the future.

ALTERNATIVES

1. Provide changes to the Draft 2020 UWMP or Water Shortage Contingency Plan.
2. Seek additional research or provide other direction.

PUBLIC NOTICING

Agenda posting and publication in the *San Jose Post Record* and the *Mountain View Voice*. Notifications were also emailed to neighborhood and business liaisons, local water agencies, and the County of Santa Clara.

Prepared by:

Elizabeth Flegel
Water Resources Manager

Emily Yarsinske
Water Resources Technician

Approved by:

Dawn S. Cameron
Public Works Director

Kimbra McCarthy
City Manager

Reviewed by:

Lisa Au
Assistant Public Works Director

EF-EY/EP/1/CAM
702-05-25-21CR
200700

Attachment: 1. Urban Water Management Plan Executive Summary