WATER SUPPLY ASSESSMENT

FOR THE

EAST WHISMAN PRECISE PLAN PROJECT

Prepared by

CITY OF MOUNTAIN VIEW

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and

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May 2019

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Table i. Acronyms Used in this Report

Acronym	Description
AFY, ac-ft/yr	Acre-feet/year
ccf, hcf	Centum cubic feet, Hundred cubic feet
gpd	Gallons per day
gpcd	Gallons per capita day, or gallons per person per day
gsf	Gross square feet
MGD	Million gallons per day
sf	Square feet
BAWSCA	Bay Area Water Supply and Conservation Agency
BMP	Best management practice
Cal water	California Water Service Company
CCR	California Code of Regulations
C&I	Commercial and Institutional
CEQA	California Environmental Quality Act
CWC	California Water Code
DDW	SWRCB Division of Drinking Water (formerly CDPH)
DMM	Demand management measure
DWR	California Department of Water Resources
ECH	El Camino Hospital
EIR	Environmental Impact Report
LAFCO	Local Agency Formation Commission
MVPWD	Mountain View Public Works Department
RWQCP	Regional Water Quality Control Plant
RWS	City and County of San Francisco's Regional Water System
SB	California Senate Bill
SCVWD	Santa Clara Valley Water District
SFPUC	San Francisco Public Utilities Commission
SVCW	Silicon Valley Clean Water (formerly SBSA)
SWRCB	California State Water Resources Control Board
UDF	Unit Demand Factor
UWMP	Urban Water Management Plan
WCIP	BAWSCA Water Conservation Implementation Plan
WSA	Water Supply Assessment
WSIP	SFPUC Water System Improvement Program
WVS	Written Verification of Supply

Table ii. Units of Measure Used in this Report

Unit	Equals
1 acre-foot	= 43,560 cubic feet = 325,851 gallons
1 cubic foot	= 7.48 gallons
1 ccf	= 100 cubic feet = 748 gallons
1 MGD	= 1,000,000 gallons/day = 1,120 acre-feet/year

Summary of Water Supply Assessment

Project: East Whisman Precise Plan Project; Mountain View, California

Pursuant to Section 10910 of the California Water Code (CWC), and based on the analysis detailed in this report and the representations by the Project's proponents, the City of Mountain View Public Works Department has determined that its currently projected water supplies will be sufficient to meet the projected annual water demands of existing and previously approved uses and the implementation of the East Whisman Precise Plan project (Project) during normal, single dry, and multiple dry years (with the implementation of the Water Shortage Contingency Plan). The Project will increase water demand within the City by approximately 1,157 acre-feet per year (AFY). For this Water Supply Assessment (WSA), the Project demand is compared to an adjusted Urban Water Management Plan (UWMP) demand, consisting of the 2015 UWMP potable demand and the estimated increase in demand resulting from the North Bayshore Precise Plan housing addition. Because the Project's projected increase was not accounted for in the 2015 UWMP, it represents an increase in the projected demand.

The Project demand results in a 8-9% increase in demand over the adjusted UWMP demand. Under normal conditions, the City is not projected to experience shortfalls with the adjusted UWMP demand alone or with the adjusted UWMP demand with the Project demand. With the adjusted UWMP demand, shortfalls of up to 11% are projected for single dry years and up to 13% in multiple dry years. When the Project demand is added to the adjusted UWMP demand, shortfalls of up to 18% and 20% are projected for single dry years and multiple dry years, respectively.

Under all dry year conditions, the City may need to impose water conservation measures, per Mountain View Municipal Code, Section 35.28, to reduce demand. Action Stage 1 calls for a demand reduction of up to 10% through increased public education and outreach to encourage voluntary reduction in water use. Action Stage 2 calls for a demand reduction of up to 20% primarily through the implementation of watering days. The implementation of these measures would result in supply remaining sufficient for the projected future demand even in multiple dry years.

Section 1 - Introduction

1.1 Project Overview

The City of Mountain View in Santa Clara County, California, (City) is reviewing the potential impacts of the East Whisman Precise Plan project (Project). The Project encompasses 368 acres bounded by U.S. Highway 101 and NASA Ames/Moffett Field to the north, City of Sunnyvale limits to the east, Central Expressway and South Whisman and Whisman Station Precise Plan Areas to the south, and Whisman Road to the west. The Project proposes the development and preparation of a Precise Plan for this area in keeping with the 2030 General Plan adopted in 2012. This Water Supply Assessment (WSA) is being prepared in accordance with SB 610 for the City's California Environmental Quality Act (CEQA) work in connection with the project. Potable water supply for the Project is provided by the City of Mountain View. Further description of the Project is given in Section 2.0.

1.2 Purpose of Water Supply Assessment

The California Water Code (§10910 et. seq.), based on Senate Bill 610 of 2001 (SB 610), requires a project proponent to assess the reliability of a project's water supply as part of the California Environmental Quality Act (CEQA) process. If the City or District providing potable water supply does not have sufficient existing water supply to meet the project demands of the project, the development of additional water supplies must be addressed in the WSA and in the project Environmental Impact Report (EIR).

Under the California Government Code (§66473.7), based on Senate Bill 221 of 2001, proposed subdivisions adding 500 dwelling units are also required to receive written verification of the available water supply from the project's water supplier. This project does not include the creation of a subdivision or a subdivision tract map, so a written verification of supply is not required.

This report is meant to serve as the WSA for the Project to meet the California Water and Government Code requirements. This WSA documents the City's existing and future water supplies for the Project area and compares them to the City's total projected water demands for the next twenty (20) years.

SB 610 requires the following steps be taken to identify the need and scope of a project's WSA:

1. Determine whether the project is subject to CEQA.
2. Determine whether the project meets the definition of a "project" per SB 610.
3. Determine the public water agency that will serve the project.
4. Determine whether any current Urban Water Management Plan considers the projected water demand for the project area.
5. Determine whether groundwater is used by the public water agency to serve the project area.

1.3 Project Subject to CEQA

CEQA applies to projects for which a public agency is directly responsible, funds, and/or requires the issuance of a permit. The City of Mountain View determined that the Project is subject to the requirements of CEQA. An EIR is currently being prepared for the Project.

1.4 Project Requiring a Water Supply Assessment

CWC §10912(a) defines a Project for WSA purposes as including any of the following:

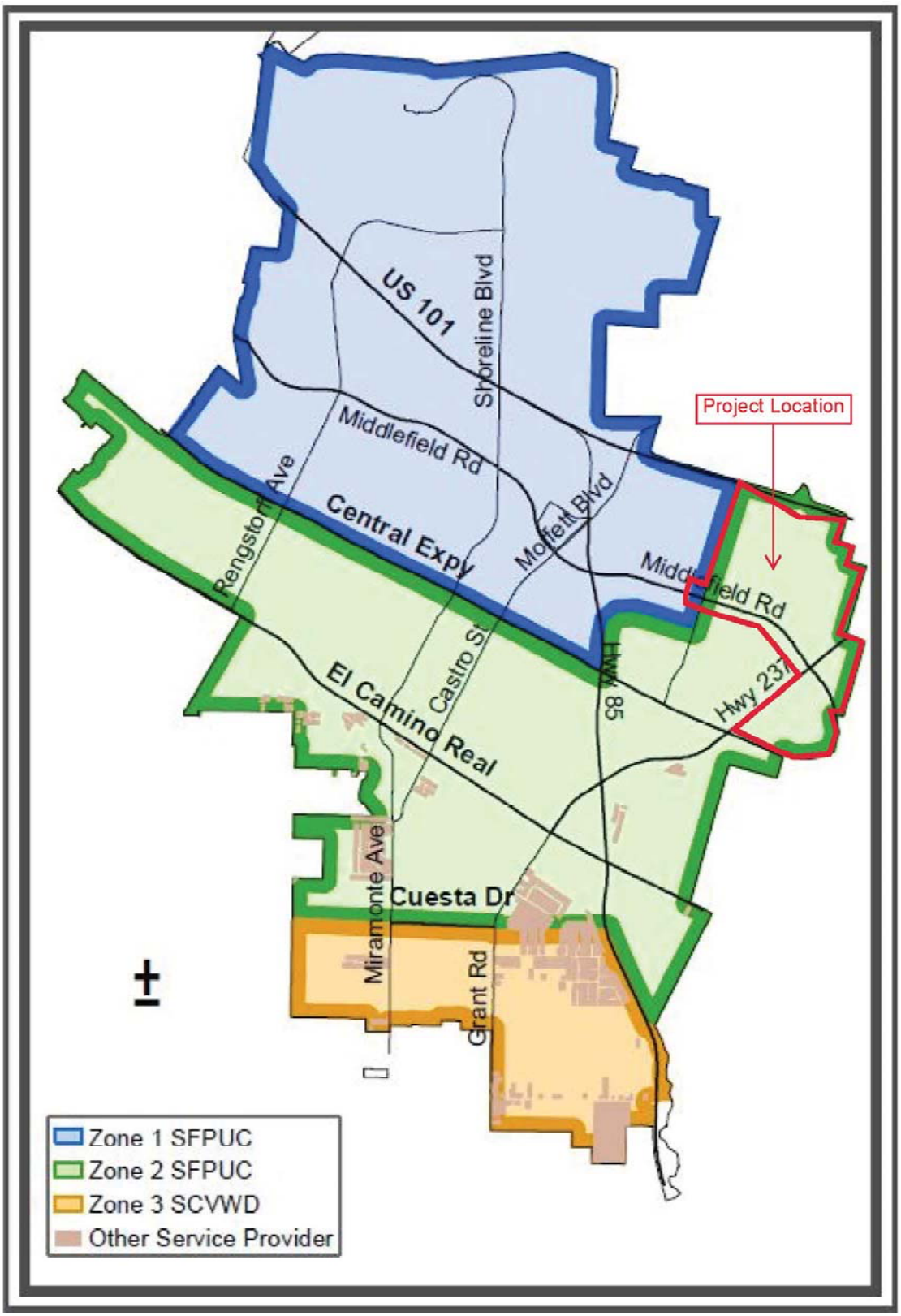
- a proposed residential development of more than 500 dwelling units;
- a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- a proposed hotel or motel, or both, having more than 500 rooms;
- a proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area;
- a mixed-use project that includes one or more of the projects identified in this list; or
- a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The Project will result in a net increase in water usage from the pre-project scenario due to the net addition of 5,000 residential units and 2,300,000 square feet of office. Therefore, the City has required a WSA for the Project.

1.5 Public Water Agency Serving the Project

The City of Mountain View municipal water system serves 98% of the City of Mountain View including the Project (see Figure 1-1). The City is the water retailer for the area in which it serves and purchases water from both the Santa Clara Valley Water District (SCVWD) and the San Francisco Public Utilities Commission (SFPUC), which are water wholesalers. The City has three service areas described by three pressure zones. Zone 3 lies south of Cuesta Drive and is supplied by treated water obtained by the City from the SCVWD. Zone 2 between Cuesta Drive and Central Expressway and Zone 1 north of Central Expressway to the San Francisco Bay are both supplied by treated water obtained by the City from the SFPUC, and can be supplemented by City operated groundwater wells. The remaining 2% of Mountain View's population is served by the California Water Service Company.

Figure 1-1: City of Mountain View Service Areas



Source: City of Mountain View

1.6 Relationship of WSA to the Mountain View Urban Water Management Plan

The California Urban Water Management Planning Act (§10610 et. seq. of the CWC) requires urban water suppliers providing over 3,000 acre-feet per year (AFY) of water or having a minimum of 3,000 service connections to prepare plans (Urban Water Management Plans or UWMPs) on a five-year, ongoing basis. An UWMP must demonstrate the continued ability of the provider to serve customers with water supplies that meet current and future expected demands under normal, single dry, and multiple dry year scenarios. These plans must also include the assessment of urban water conservation measures and wastewater recycling. Pursuant to Section 10632 of the CWC, the plans must also include a water shortage contingency plan outlining how the water provider will manage water shortages, including shortages of up to fifty percent (50%) of their normal supplies, and catastrophic interruptions of water supply. The City of Mountain View is required to prepare Urban Water Management Plans. The City's most recent Urban Water Management Plan (2015 UWMP) was adopted in June 2016. The 2015 UWMP projected demands for 25 years through the year 2040. An addendum to the 2015 UWMP was prepared in September 2017 following a transfer of 1.0 MGD of the City's water supply rights from the San Francisco Regional Water System to the City of East Palo Alto.

As provided for in the State law, this WSA incorporates by reference and relies upon many of the planning assumptions and projections of the 2015 UWMP in assessing the water demands of the proposed Project relative to the overall increase in water demands expected within the entire City service area. The 2015 UWMP projected a moderate increase in water demand within the City due to the projected infill development under the City 2030 General Plan. The 2015 UWMP projected overall total water demand within the City to increase from 8,610 AFY in year 2015 to 13,509 AFY in year 2040, a net increase of 4,899 AFY (approximately 57%). This increase accounts for plumbing code updates (2% use reduction in 2020 to 9% in 2040). Conservation measures[1] are not included and could result in an additional 8% (2020-2040) reduction from the base-case scenario.

The Project is proposing development above what was projected in the 2030 General Plan. The East Whisman commercial development was also specifically listed as a project under consideration by the City Council but not approved at the time of the adoption of the 2015 UWMP. As a result, the Project will result in demands higher than those projected in the 2015 UWMP.

[1] 2015 UWMP, Section 4.2.1-.2 Table 4-3

Section 2 - Project Description and Water Demands

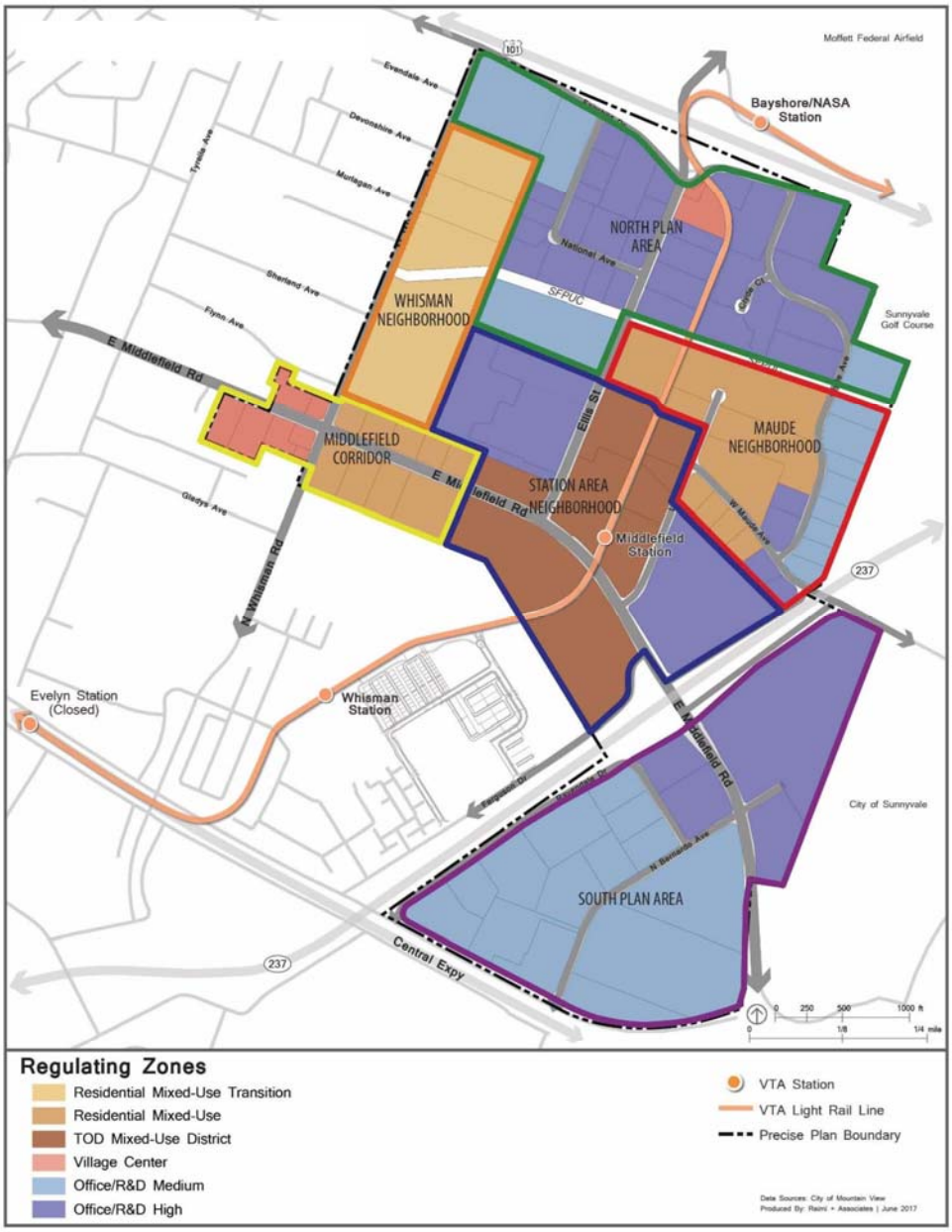
2.1 Project Description

The Project proposes the development and preparation of a Precise Plan for the area identified in 2030 General Plan as the East Whisman area. The Project encompasses 368 acres bounded by U.S. Highway 101 and NASA Ames/Moffett Field to the north, City of Sunnyvale limits to the east, Central Expressway and South Whisman and Whisman Station Precise Plan Areas to the south, and Whisman Road to the west (Figure 2-1).

Currently, the area is distinguished by its high-technology campuses and large-format commercial office buildings situated on large blocks. The General Plan, however, described a vision for a transit-oriented center, an improved multimodal transportation network, and a greater diversity of land uses. The Project area is split into six “complete neighborhoods”: Station Area Neighborhood, Middlefield Corridor, Maude Neighborhood, Whisman Neighborhood, South Plan Area, and North Plan Area. These complete neighborhoods define the desired character and amount of land uses within the different parts of Precise Plan area.

The proposed land use for the Project will result in a net increase of approximately 2.3 million square feet of office, 40,000 square feet of retail, 60,000 square feet of restaurants, 5,000 multi-family residential units, and 200 hotel rooms.

Figure 2-1: Proposed Project Land Use and Complete Neighborhoods



Source: City of Mountain View, 2017

2.2 Project Land Use and Water Demands

The Project proposes the development of a Precise Plan that will include a variety of land use types. Water demand from the proposed land use types can be estimated on a per-unit or per-square foot basis using unit duty factors. Municipal water meter records have been reviewed for the period between November 2004 and March 2018 for the existing buildings in the Project area. Meter records provided water use in centum cubic feet (ccf).

Because the reading period for meters within the Project area varied, water use for each parcel within the Precise Plan was calculated as an average daily use for each day within each reading period. These daily uses were summed across all of the parcels within the Project area and used to calculate monthly use by water use type. Water meter data was provided for commercial, industrial, and irrigation use. The average existing water use for the Project area is 503 AFY, as shown in Table 2-1. Water use over the period of record for each water use type is shown in Figure 2-2.

Table 2-1: Average Existing Water Use at Project Area

Average Monthly Water Use (ccf/month)	Average Daily Water Use (gpd)	Average Yearly Use (AFY)
17,995	448,680	503

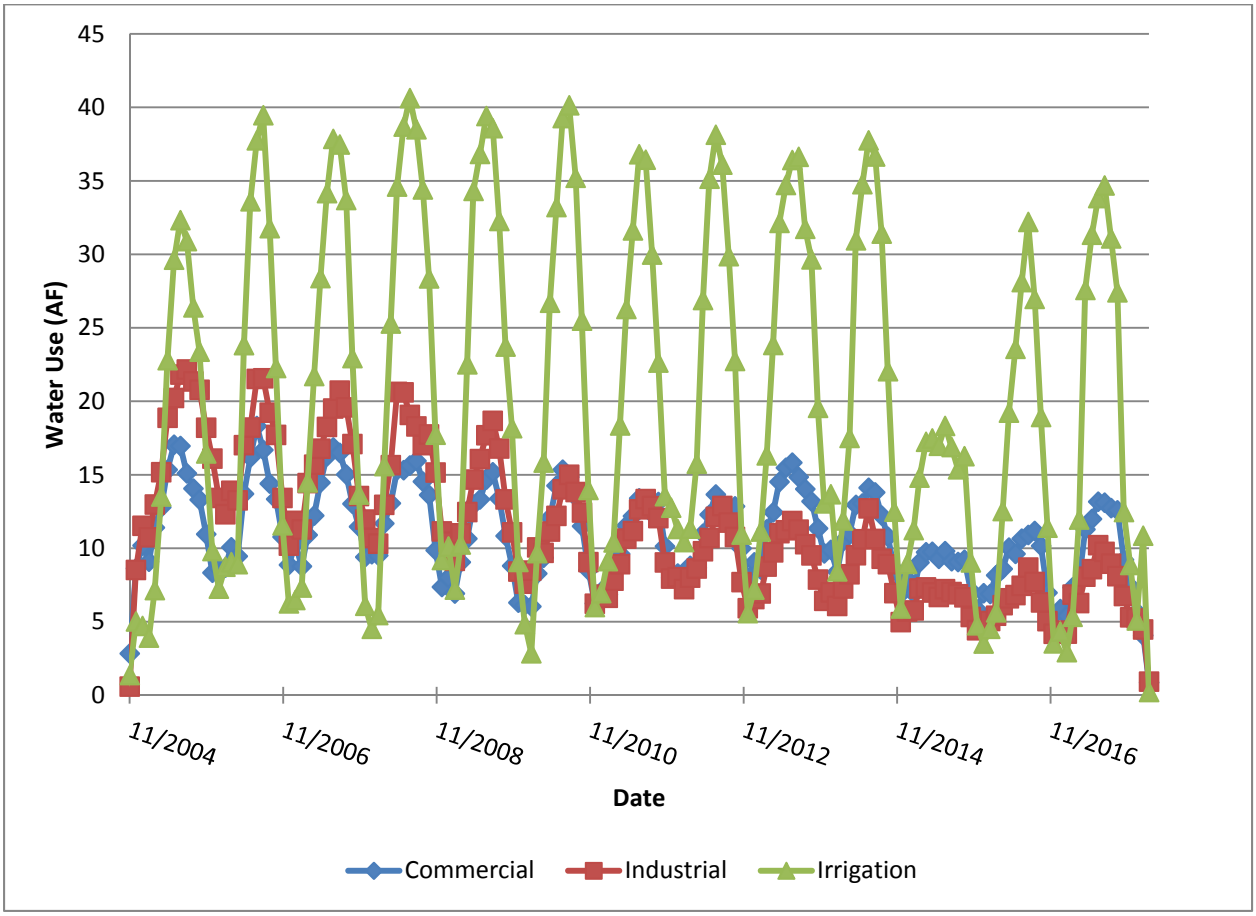


Figure 2-2. Monthly Use within Project Area from 2004 to 2018

In this report, unit duty factors for the Project and other approved projects are based on the North Bayshore Precise Plan Phase II (NBPP) duty factors and the 2010 Water Master Plan. The NBPP duty factors were approved by the City and include indoor and outdoor water use. The duty factors are based on information from several sources, including the General Plan Update Utility Impact Study (GPUUIS) and recent water use data.

Table 2-2: Unit Duty Factors

Land Use	Unit	Duty Factor (gpd/unit) or (gpd/1000 sq ft)	Source
Single-Family	Dwelling Units	225	GPUUIS
Multi-Family	Dwelling Units	100	Recent Development Projects Meter Data
Office	Square Feet	90	Recent NBPP Meter Data
HIO/R&D	Square Feet	130	Recent NBPP Meter Data
Retail	Square Feet	130	GPUUIS
Industrial	Square Feet	60	Recent NBPP Meter Data
Restaurant	Square Feet	1,200	GPUUIS
Service	Square Feet	130	GPUUIS
Hotel	# Rooms	100	Capacity Fee & Recent Residential Meter Data
Institutional/Recreational	Square Feet	165	Recent NBPP Meter Data
Mixed Use	Square Feet	130	2010 Water Master Plan

Source: North Bayshore Precise Plan Phase II Utility Impact Study, 2016; 2010 Water Master Plan

2.3 Project Total Water Demands

The total water demand projected for the Project at build-out based on unit duty factors presented in Table 2-2 is 1,935 AFY. This is an increase of approximately 1,157 AFY over existing demands. The City does not have a unit demand factor for parking garages; therefore Table 2-3 represents the demands of the buildings and surrounding landscaping.

These estimates are conservative as they do not account for water conservation efforts and policies included in the East Whisman Precise Plan. The Precise Plan will require all new non-residential construction to be LEED BD+C Gold and implement mandatory CALGreen requirements. Additionally, all new residential construction shall meet the City's minimum green building requirements and mandatory CALGreen requirements.

Potable demand as estimated in Table 2-2 may also be reduced with the expansion of recycled water to the Project area. As discussed in Section 3.1.4, the recycled water system does not currently serve the Project, but the Project area is within the recommended expanded service area. The Precise Plan will require all new non-residential buildings greater than 25,000 square feet to dual-plumb for recycled water use in toilet flushing. Once the expansion is completed, all new non-residential and residential projects will be required to use recycled water in lieu of potable water for irrigation.

Table 2-3: Estimation of Existing and Future Water Demand Using UDFs (AFY)

Land Use Type	Existing Condition					Future Condition					Estimated Increase
	Unit Duty Factor (gpd/unit or gpd/1000 sf)	Units	Area (sf)	Daily Demand (gpd)	Total Demand (AFY)	Unit Duty Factor (gpd/unit or gpd/1000 sf)	Units	Area (sf)	Daily Demand (gpd)	Total Demand (AFY)	Total Demand (AFY)
Office	90	-	3,684,009	331,561	371	130	-	8,299,234	1,078,900	1,209	837
HIO/R&D	130	-	2,562,930	333,181	373	130	-	395,995	51,479	58	-316
Industrial	60	-	196,062	11,764	13	60	-	47,773	2,866	3	-10
Single Family Residential	225	1	-	225	1	-	-	-	-	-	-
Multi-Family Residential	100	-	-	-	-	100	5,000	-	500,000	560	560
Retail	130	-	43,191	5,615	6	130	-	103,058	13,398	15	9
Restaurant	1200	-	10,588	12,706	14	1,200	-	50,721	60,865	68	54
Hotel	100	-	-	-	-	100	200	-	20,000	22	22
Total					***778***					***1,935***	***1,157***

2.4 City Water Demands

2.4.1 Historical and Current Water Demands

Table 2-4 shows the City's water use over the period 2010-2017 in AFY. The City's average use over that period was 10,130 AFY, or 9.04 mgd. Water demand in 2015 was 19 percent lower than in 2010. These water savings are likely the result of conservation efforts in response to the drought that began in 2012.

Table 2-4: Historical and Current Water Demands (AFY)

Customer Type	2015 UWMP						BAWSCA Annual Survey	
	Year						Year	
	2010	2011	2012	2013	2014	2015	2016	2017
Single Family Residential	2,885	2,863	3,060	3,110	2,721	2,147	2,015	2,172
Multi-Family Residential	3,417	3,324	3,360	3,343	3,004	2,760	2,767	2,822
Commercial and Institutional	1,528	1,521	1,532	1,568	1,508	1,381	1,435	1,384
Industrial	451	470	475	487	497	405	378	368
Landscape Irrigation	2,088	2,091	2,247	2,651	2,190	1,520	1,736	1,474
Construction	5	7	4	3	7	2	–	–
Landscape Irrigation	502	468	547	224	395	394	–	–
Construction	0	0	0	0	5	1	–	–
Total	***10,876***	***10,744***	***11,225***	***11,386***	***10,327***	***8,610***	***8,849***	***9,026***

Source: 2015 UWMP, Table 4-1 for data from 2010 to 2015; BAWSCA Fiscal Year 2015-2016 and Fiscal Year 2016-2017 Annual Surveys for data from 2016 to 2017

2.4.2 Future Demands

Table 2-5 shows projected water demands for the City through 2040, taken from the 2015 UWMP. The projections shown take into account plumbing code updates but do not include savings due to conservation measures. Landscape irrigation includes potable and recycled water demands. Relative to pre-drought demands in 2013, the 2015 UWMP projects minor demand growth in the single-family residential sector and moderate growth in multi-family residential, commercial and institutional, industrial, and landscape irrigation sectors.

Table 2-5: 2015 UWMP Water Demand Projections (AFY)

Customer Sector	Year				
	2020	2025	2030	2035	2040
Single Family Residential	3,140	3,146	3,150	3,175	3,214
Multi-Family Residential	3,240	3,298	3,351	3,430	3,525
Commercial and Institutional	1,728	1,778	1,830	1,885	1,942
Industrial	515	509	504	499	494
Landscape Irrigation	2,799	2,923	3,046	3,170	3,293
Construction	5	6	6	6	6
Nonrevenue Water	880	918	958	996	1,034
Total Demand	***12,307***	***12,578***	***12,845***	***13,161***	***13,509***

Source: 2015 UWMP, Table 4-5

Since the 2015 UWMP was adopted, more aggressive multi-family residential land use policies have been adopted, including the North Bayshore Precise Plan housing addition. The North Bayshore Precise Plan housing addition was specifically not included in the 2015 UWMP analysis as it had not been approved at the time the UWMP was adopted. However, for this analysis, the incremental increase in demand due to the North Bayshore Precise Plan housing addition is added to the total projected demand from the 2015 UWMP shown in Table 2-5 for each planning horizon to create the adjusted UWMP demand. This adjusted UWMP demand is then compared to the demands associated with the East Whisman Precise Plan. Adjusted UWMP demands can be seen in Table 4-1.

As of February 2019, there are 80 additional projects that are planned, approved, or under construction. The associated net water demands are provided in Table A-1 and summarized by customer sector in Table 2-6. Net water demands are based on new floor area and dwelling units after deducting existing water use on-site based on the City of Mountain View Planning Update from July 2018. The total demand for these projects is approximately 1,847 AFY. Table 2-7 compares the demand associated with the planned projects to projected demands in the 2015 UWMP.

Table 2-6: Planned Projects Demand by Customer Sector (AFY)

Customer Sector	Planned Projects Demand (AFY)[1,2]
Single-Family Residential	174.4
Multi-Family Residential	722.6
Commercial and Institutional	959.7
Industrial	-12.0
Total	***1,844.7***

Notes:

1. *Projects based on City of Mountain View Planning Division Update February 2019.*
2. *Water demand based on the North Bayshore Precise Plan Phase II Duty Factors of 225 gpd/Dwelling Unit (DU) for Single Family, 100 gpd/DU for Multi-Family, 0.090 gpd/sf for Office, 0.130 gpd/sf for Research & Development, 0.130 gpd/sf for Retail, 0.060 gpd/sf for Industrial, 1.20 gpd/sf for Restaurant, 0.130 gpd/sf for Service, 100 gpd/room for Hotel, and 0.165 gpd/sf for Institutional/Recreational. Water demand for Mixed Use based on 2010 Water Master Plan Unit Duty Factor of 0.130 gpd/sf.*

Table 2-7: Planned Demand and Projected Demand Comparison (AFY)

	2013	2020	2025	2030	2035	2040
2015 UWMP Projected Demand	11,386	12,307	12,578	12,845	13,161	13,509
Pre-Drought Demand (2013)	11,386	11,386	11,386	11,386	11,386	11,386
Planned Projects Demand	0	1,845	1,845	1,845	1,845	1,845
Pre-Drought + Planned Projects Demand	11,386	13,231	13,231	13,231	13,231	13,231
Difference	***0***	***-924***	***-653***	***-386***	***-70***	***278***

As seen in Table 2-7, development may be slightly outpacing the 2015 UWMP projections for 2020 through 2035. There could be several reasons for this observation. First, estimated demands presented in Table 2-6 may overestimate actual demand increases associated with planned projects. The estimates do not account for replacement of existing buildings if information about square footage was not provided in the City of Mountain View Planning Division Update from July 2018, which would result in a reduction of the total increase in water demand. Second, completion of many projects included in Table 2-6 are several years out and may better align with the UWMP projections at the time they are completed and occupied. Third, although the UWMP projects increase in demand linearly, development may occur at any time within the land-use planning horizon and its pace is often influenced by the economy and other factors.

2.4.3 Dry-Year Demands

Section 10631 of the Water Code requires that water demands be estimated for an average water year, a single dry water year and multiple dry water years. As discussed in the City's 2015 Urban Water Management Plan, the Mountain View service area has a Mediterranean climate, with cool wet winters and warm dry summers. Rain typically occurs in November through April. Evapotranspiration (ETo) greatly exceeds annual rainfall, resulting in high water demands for landscape irrigation. During dry

years, the irrigation demand for the Project can be expected to increase by 5%[2], while the indoor demands remain constant. However, during dry years, landscape irrigation is considered a non-essential use and restriction is prioritized over indoor usage. The Project will be subject to staged water use restrictions associated with the City's Water Shortage Contingency Plan.

[2] California Irrigation Management Information System, Station 171 - Union City

Section 3 - Water Supply

3.1 Current Supply

The City of Mountain View water supply is primarily obtained through imports from the San Francisco Public Utility Commission (SFPUC) and the Santa Clara Valley Water District (SCVWD) totaling 86 percent and 7 percent of the supply respectively. This is supplemented with local groundwater wells comprising about 2 percent of the supply. In North Bayshore, recycled water is available from the Palo Alto Regional Water Quality Control Plant (RWQCP) for non-potable uses, which equaled 5 percent of the total supply in 2015. A small portion of the City is served by California Water Service Company (Cal Water), Los Altos District.

3.1.1 SFPUC

The majority of the City's water supply comes from the City and County of San Francisco's Regional Water System (RWS), which is operated by the SFPUC. Mountain View is one of 26 wholesale customers that are supplied by the RWS, which also supplies the City and County of San Francisco. The "Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County and Santa Clara County" (July 2009) governs this relationship. The RWS produces approximately 265 MGD (296,800 AFY), allocated as 81 MGD for retail customers and 184 MGD for wholesale customers. Under the 2009 Water Supply Agreement, the SFPUC provides up to 13.46 MGD to the City, or approximately 15,078 AFY. In May 2017, the City agreed to transfer 1.0 MGD (1,120 AFY) of its water supply rights from the SFPUC to East Palo Alto; the SFPUC now provides up to 12.46 MGD (13,955 AFY) to the City[3].

3.1.2 SCVWD

The SCVWD acts as the primary water resources agency for Santa Clara County and imports water from various State and Federal water projects. In addition, the SCVWD captures and stores local surface water and recharges local groundwater basins. The SCVWD has a contract for 152,500 AFY of water from the Federal Central Valley Project (CVP) and 100,000 AFY from the State Water Project (SWP). Locally, the SCVWD operates ten reservoirs with a combined storage capacity of 169,000 acre-feet. The SCVWD manages the recharge of the groundwater basins but does not operate any groundwater wells. Mountain View receives water from the SCVWD through a 70 year water supply contract that was entered into in 1984. The City provides the SCVWD with a 3-year demand projection, anticipated monthly deliveries for the year, and projection information for the next seven years. These projections allow the SCVWD to manage its water to meet the demands for the next five years. The estimated maximum available supply to Mountain View is 1,200 AFY.

3.1.3 Groundwater in Mountain View

Mountain View owns and operates seven potable groundwater wells within the Santa Clara Plain Subarea of the Santa Clara Subbasin (DWR Subbasin 3.301). The SCVWD manages the recharge of the groundwater basin per the 2016 SCVWD Groundwater Management Plan which describes the programs in place to maintain a reliable groundwater supply. In July of 2016, the SCVWD called for a continued reduction in water use of 20 percent compared to 2013.

[3] 2015 UWMP Addendum No. 1, 2017

The SCVWD reported that the long-term average groundwater pumping in the Santa Clara Subbasin is 103,000 AFY[4]. Over the past twenty years, the City extracted on average less than 1% of this total at 563 AFY. In 2015, the City pumped almost a quarter of the average extraction (145 AFY) due to required pumping restrictions County-wide to address concerns of overdraft within the Santa Clara Subbasin.

Historical groundwater production in Mountain View from 2010 to 2015 is shown in Table 3-1. Future groundwater production is anticipated to meet about 5% of the City's total water needs[5]. Based on historical use, the estimated maximum available supply is 1,525 AFY. Groundwater well production may be increased to meet future demands.

Table 3-1: Historical Groundwater Production

Year	Production (AFY)
2010	476
2011	441
2012	387
2013	389
2014	782
2015	145*

Source: 2015 UWMP, Table 5-1

** Groundwater production in 2015 was low due to County-wide required pumping reductions to address concerns of overdraft within the basin.*

3.1.4 Recycled Water

The Palo Alto RWQCP provides recycled water to the City of Mountain View for the North Bayshore Area. While the recycled water system does not currently serve the Project, a large portion of the Project area is within the recommended expanded service area for recycled water in the *Recycled Water Feasibility Study* (2014). The recommended project from the 2014 study is divided into three phases: short-term, mid-term, and long-term. Recycled water would be available to the Project area as part of the long-term phase of the recommended project. This long-term phase was not scheduled as part of the 2014 study and would require pipelines in the short-term and mid-term projects to be constructed prior to construction of pipelines in the long-term phase. The Precise Plan will require all new non-residential construction to use recycled water once available toilet flushing and all new non-residential and residential construction to use recycled water for irrigation, as described in Section 2.3.

3.2 Normal and Dry Year Supply

The Project is located in an area of the City served primarily with SFPUC treated water.

The reliability of the San Francisco RWS is discussed in detail in the 2015 Urban Water Management Plan. In order to enhance the ability of the SFPUC water supply system to meet identified service goals for water quality, seismic reliability, delivery reliability, and water supply, the SFPUC has undertaken the Water System Improvement Program (WSIP). The WSIP will deliver capital improvements aimed at a total delivery reliability goal of 265 MGD of supply with no greater than 20 percent rationing in any one

[4] SCVWD Groundwater Management Plan, 2016
[5] UWMP, 2015

year of a drought. This project is currently being implemented, and is anticipated to be complete in late 2019.

The SFPUC has analyzed past system yields to identify periods with single and multiple dry-years. The SFPUC has translated these dry-year projections into reductions to the total 184 MGD water supply available to the Bay Area Water Supply and Conservation Agency (BAWSCA) members. SFPUC's projections indicate that a 17% system-wide reduction in supply will occur in a single dry-year and up to a 28% system-wide reduction will occur in multiple dry-years[6].

The SCVWD has developed a 2015 UWMP to discuss the potential threats to water supply including climate change, local fisheries operations, invasive species damage, earthquake, environmental regulations, and reduced groundwater production. The SCVWD aims to limit dry-year reductions to no greater than 10%. However, SCVWD modeling indicates County-wide supply shortfalls of between 15 and 37 percent during multiple dry years. To address these shortfalls, the SCVWD would likely implement a combination of calls for short-term water use reductions, use of reserves, and obtaining additional supplies through transfers and/or exchanges.

The City projects a maximum potable water demand of 12,419 AFY during the planning period, so a net shortfall of 4% may be realized during multiple dry water years without the approved projects. The supply shortfalls are anticipated to be met through temporary demand reduction measures as described in the City's Shortage Contingency Plan[7].

3.3 Conservation

The City has implemented a variety of water conservation measures, as described below, and works with the SCVWD and BAWSCA on conservation programs. The City has two permanent full-time positions dedicated to water conservation as part of the City's Water Conservation Program.

First, the City has updated several regulations to reduce water use. In 2015, the water waste prevention ordinance was updated and expanded to include permanent water use restrictions and more restrictive prohibitions according to increasing stages of water shortage. In February of 2016, the City updated its Water Conservation in Landscaping Regulations, which promote the use of region-appropriate plants and establish standards for irrigation efficiency. The City also approved the Mountain View Green Building Code in March 2011, which requires water-efficient plumbing fixtures or a 20% reduction from baseline water use for new or renovated buildings.

Second, the City worked to make water metering more conservation-minded and to maintain low water loss in the system. Radio-equipped meters were installed in the City starting in 2007, allowing the City to save time and money by removing the need to manually read meters. The City is currently conducting a feasibility study to evaluate a new version of meter reading called Advanced Metering Infrastructure. Advanced Metering Infrastructures generates real time data and, with certain software, can allow customers to see how and when they use water. The City also audits water loss annually and the audits have shown less than a 10 percent system loss, which is consistent with the industry standard. To maintain the water system, the City has an infrastructure and capital improvement program and ongoing

[6] SFPUC UWMP, 2015
[7] UWMP, 2015

maintenance and repair activities. When billing customers, the City uses tiered rates and uniform rates, respectively, which are considered conservation-oriented by the California Urban Water Conservation Council.

Third, the City, along with its partners, provides account-specific ways to conserve water. Single-family residential accounts receive bimonthly Home Water Reports and both single- and multi-family accounts can receive water-use surveys. For dedicated landscape irrigation accounts with 500 ccf in annual irrigation water use, the City provides monthly reports that track actual usage compared to a calculated budget based on landscape area and climate conditions. Landscape water audits are also encouraged to provide landscape managers with water-use analyses, scheduling information, in-depth irrigation evaluations, and recommendations for affordable irrigation upgrades.

Fourth, rebates and free equipment are available for a variety of water account holders through the City and its partners. Restaurants may receive low-flow prerinse dishwashing spray valves from the SCVWD or the City if they have less efficient spray valves. Rebates are available from the City for multi-family accounts who install a submeter to meter individual units. Customers who install water-efficient irrigation equipment and/or replace turf with low-water use plantings may receive rebates from the SCVWD. Businesses that implement process and equipment changes resulting in significant water savings are eligible for a rebate from the SCVWD.

Finally, the City and its partners provide information and outreach programs in many different ways. Outreach and educational programs include complimentary assembles by EarthCapades, free in-class lessons by SCVWD, and landscape education classes by the City. The Water Conservation Program maintains an online presence through a dedicated website and posts to Facebook, Twitter, and Nextdoor. Information about conservation, events, and incentive programs is provided on bills and bill inserts and at community and corporate events. Brochures are available in buildings throughout the City and there is a dedicated phone line for water conservation-related customer inquiries.

Conservation efforts are projected to reduce water use by 8% in 2020 and 2040, but are not included in the demand projections in the Mountain View 2015 UWMP.

3.4 Regulatory Permits Necessary for Supply Delivery

The City of Mountain View operates a public water system, permitted by the California Department of Public Health, System No. 4310007. The Project is currently connected to the water distribution system, so no additional project permits are required. The City purchases wholesale water supply from the San Francisco Regional Water System, which is a public water system permitted by the California Department of Public Health, System No. 3810001 and from the Santa Clara Valley Water District, System No. 4310027. All systems are required to comply with California Code of Regulations Title 22 per the State Water Resources Control Board Division of Drinking Water.

Section 4 - Supply Sufficiency Analysis

4.1 Comparison of Project Demands to Projected Supply

For this analysis, Project demand is compared to an adjusted UWMP projected demand, which accounts for more aggressive housing development levels than projected in the 2015 UWMP. The adjusted UWMP projected demand consists of the 2015 UWMP potable demand and the estimated increase in demand from the North Bayshore Precise Plan housing addition. The 2015 UWMP potable demand is based on land use from the 2030 General Plan, including the North Bayshore Precise Plan, El Camino Real Precise Plan, and San Antonio Precise Plan. The North Bayshore housing addition demand is based on the North Bayshore Precise Plan Project WSA by Todd Groundwater. The UWMP demand includes water savings from plumbing code updates only.

The Project results in an 8-9% increase in demand over the adjusted UWMP in all years. With the addition of Project, the City's water supply contract with the SFPUC and SCVWD meets the projected water demands throughout the planning period, as shown in Table 4-1 below. Supply from the Santa Clara Valley Water District (SCVWD) and groundwater represent expected supply needs, but supply from the San Francisco Public Utilities Commission (SFPUC) represents the expected supply needs up to the maximum supply after the water rights transfer to East Palo Alto[8].

[8] 2015 UWMP Addendum No. 1, 2017

Table 4-1: Mountain View Production vs. Demand, Normal Year (AFY)

Supply Source	Year				
	2020	2025	2030	2035	2040
SFPUC[1]	12,117	12,284	12,537	12,837	13,174
SCVWD[2]	1,200	1,200	1,200	1,200	1,195
Groundwater[2]	566	574	588	604	621
Potable Supply	13,833	14,058	14,325	14,641	14,990
Adjusted UWMP Potable Demand[3]	12,726	12,901	13,168	13,484	13,833
Project Demand	1,157	1,157	1,157	1,157	1,157
Difference (% demand)	***0***	***0***	***0***	***0***	***0***
Recycled Supply[4]	995	1,091	1,091	1,091	1,091
Recycled Demand[4]	995	1,091	1,091	1,091	1,091
Difference (% demand)	***0***	***0***	***0***	***0***	***0***

Source: UWMP, 2015, Table 6-3

Notes:

1. *SFPUC production differs from that presented in the North Bayshore Precise Plan Project Water Supply Assessment by Todd Groundwater. The production shown here is based on expected supply needs up to the maximum water supply after the water rights transfer to East Palo Alto.*
2. *Supply is based on expected supply needs and does not necessarily reflect the maximum supply available.*
3. *Demand is the sum of the projected potable demand in Table 6-3 in the 2015 UWMP and the estimated increase in demand for the North Bayshore Precise Plan housing addition based on the North Bayshore Precise Plan Project Water Supply Assessment by Todd Groundwater.*
4. *Recycled water supply and demand would increase if and when the recycled water system is expanded to the Project area.*

4.2 Reliability of Water Supply

The deficit between potable supply and demand during a single dry year is estimated to range between 3% in 2020 and 11% in 2040 with the adjusted UWMP demand. When the Project is added to the adjusted UWMP demand, the deficit is estimated to range between 11% and 18%

The shortage is anticipated to be met through temporary demand reduction measures according to the City's Water Shortage Contingency Plan and a potential increase in groundwater supply. The maximum available groundwater is estimated in the 2015 UWMP to be 1,525 AFY based on historical use and could be used to offset some of the deficient during dry years. Recycled water supply and demand is not anticipated to change during drought years and is considered a reliable water source during drought years. Table 4-2 shows the deficit between supply and production in Mountain View during a single dry-year with the Project demand added to the adjusted UWMP demand.

Table 4-2: Mountain View Production vs. Demand, Single Dry-Year (AFY)

Supply Source	Year				
	2020	2025	2030	2035	2040
SFPUC[1]	10,597	10,597	10,597	10,597	10,597
SCVWD[2]	1,200	1,200	1,200	1,200	1,104
Groundwater[2]	566	574	588	604	621
Potable Supply	12,363	12,371	12,385	12,401	12,322
Adjusted UWMP Potable Demand[3]	12,726	12,901	13,168	13,484	13,833
Project Demand	1,157	1,157	1,157	1,157	1,157
Difference (% demand)	***-11***	***-12***	***-14***	***-15***	***-18***
Recycled Supply[4]	995	1,091	1,091	1,091	1,091
Recycled Demand[4]	995	1,091	1,091	1,091	1,091
Difference (% demand)	***0***	***0***	***0***	***0***	***0***

Source: UWMP 2015, Table 6-4

Notes:

1. *SFPUC production is based on the single dry year maximum supply.*
2. *Supply is based on expected supply needs and does not necessarily reflect the maximum supply available.*
3. *Demand is the sum of the projected potable demand in Table 6-3 in the 2015 UWMP and the estimated increase in demand for the North Bayshore Precise Plan housing addition based on the North Bayshore Precise Plan Project Water Supply Assessment by Todd Groundwater.*
4. *Recycled water supply and demand would increase if and when the recycled water system is expanded to the Project area.*

With the adjusted UWMP demand, the deficit between demand and supply ranges between 5% and 13% during multiple dry years. The maximum deficit occurs in Years 2 and 3 of 2040, when projected water demands exceed the available potable supply by up to 1,860 AFY.

When the Project demand is added to the adjusted UWMP demand, the deficit between demand and supply ranges from 13% to 20% during multiple dry years, as shown in Table 4-3. The maximum deficit occurs in Years 2 and 3 of 2040, where projected water demands exceed the available potable supply by up to 3,107 AFY.

The City has a staged Water Shortage Contingency Plan, described in detail in the 2015 UWMP, which includes a mix of voluntary and mandatory rationing actions. The Contingency Plan can mitigate shortfalls of up to 50%. Consequently, the 20% demand shortfall projected herein should be mitigated by conservation and water use restrictions described in the Contingency Plan. Water use during July 2017 in the City was 32% less than in 2013. If the City exceeds the growth of its neighboring cities, it could also receive more drought allocation from the SFPUC in future dry years than was modeled in the 2015 UWMP.

Table 4-3: Mountain View Production vs. Demand, Multiple Dry-Years (AFY)

Supply Source	2020			2025			2030			2035			2040		
	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
SFPUC[1]	12,339	10,597	10,597	12,468	10,597	10,597	12,745	10,597	10,597	13,069	10,597	10,597	13,415	10,597	10,597
SCVWD[2]	978	769	894	1,016	833	937	992	805	906	968	778	864	954	755	843
Groundwater[2]	566	566	566	574	574	574	588	588	588	604	604	604	621	621	621
Potable Supply	13,883	11,932	12,057	14,058	12,004	12,108	14,325	11,990	12,091	14,641	11,979	12,065	14,990	11,973	12,061
Adjusted UWMP Potable Demand[3]	12,726	12,726	12,726	12,901	12,901	12,901	13,168	13,168	13,168	13,484	13,484	13,484	13,833	13,833	13,833
Project Demand	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157	1,157
Difference (% demand)	***0***	***-14***	***-13***	***0***	***-15***	***-14***	***0***	***-16***	***-16***	***0***	***-18***	***-18***	***0***	***-20***	***-20***
Recycled Supply[4]	995	995	995	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091
Recycled Demand[4]	995	995	995	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091	1,091
Difference (% demand)	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***	***0***

Source: UWMP, 2015, Table 6-5

Notes:

1. *SFPUC production differs from that presented in the North Bayshore Precise Plan Project Water Supply Assessment by Todd Groundwater. The production shown here is based on expected supply needs up to the maximum water supply after the water rights transfer to East Palo Alto.*
2. *Supply is based on expected supply needs and does not necessarily reflect the maximum supply available.*
3. *Demand is the sum of the projected potable demand in Table 6-3 in the 2015 UWMP and the estimated increase in demand for the North Bayshore Precise Plan housing addition based on the North Bayshore Precise Plan Project Water Supply Assessment by Todd Groundwater.*
4. *Recycled water supply and demand would increase if and when the recycled water system is expanded to the Project area.*

Section 5 - Conclusions

5.1 Sufficiency of Water Supply for the Project

The Project is projected to increase water demand to 1,935 AFY at build-out with a net incremental increase of 1,157 AFY (Table 2-3). As the 2030 General Plan did not account for the change in development densities proposed in the Project area, the increase in water use within the Project area has not been accounted for in the projected growth in water use shown in the 2015 UWMP. The East Whisman Precise Plan will require new non-residential construction to meet LEED BD+C Gold and CALGreen requirements and will require all new residential construction to meet the City's minimum green building and CALGreen requirements. If and when the recycled water system is expanded to the Project area, the Precise Plan will require all new non-residential irrigation will be required to use recycled water in lieu of potable water. All new non-residential buildings greater than 25,000 square feet will also be required to dual-plumb for recycled water use in toilet flushing. These conservation measures will reduce the actual onsite water demand. The Project results in an 8-9% increase in demand over the adjusted UWMP demand in all years.

The City of Mountain View water service has sufficient existing water supply to fully support the Project under normal, single dry, or multiple dry water years (with implementation of the Water Shortage Contingency Plan). Under normal conditions, the City is not projected to experience supply shortfalls. With the adjusted UWMP demand only, shortfalls of up to 11% are projected for single dry years and up to 13% in multiple dry years. When the Project demand is added to the adjusted UWMP demand, shortfalls of up to 18% are projected for single dry years and up to 20% for multiple dry years. Under all dry year conditions, the City may need to impose water conservation measures, per Mountain View Municipal Code, Section 35.28, to reduce demand. Action Stage 1 calls for a demand reduction of up to 10% through increased public education and outreach to encourage voluntary reduction in water use. Action Stage 2 calls for a demand reduction of up to 20% primarily through the implementation of watering days. The implementation of these measures would result in supply remaining sufficient for the projected future demand even in multiple dry-years.

5.2 Future Actions

Section 10911(b) of the Water Code states "The City or County shall include the water assessment provided pursuant to Section 10910, in any environmental document prepared for the Project pursuant to [CEQA]." The City of Mountain View will need to adopt this WSA as part of the CEQA environmental review for the proposed Project, including the findings described above.

Appendix A: Water Demand Estimate Tables

Table A-1: Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
1411-1495 W ECR	53	0	0	-13,200	0	5.9	0.0	0.0	-1.3	0.0	4.6
355-415 E Middlefield Rd	458	0	0	0	17,424	51.3	0.0	0.0	0.0	3.2	54.5
938-954 Villa St	0	0	2,922	38,954	0	0.0	0.0	3.9	3.9	0.0	7.9
701 W Evelyn Ave	0	0	8,050	30,840	0	0.0	0.0	1.2	3.1	0.0	4.3
325-339 Franklin St	2	0	0	0	0	0.2	0.0	0.0	0.0	0.0	0.2
756 California St	0	0	0	7,664	0	0.0	0.0	0.0	0.8	0.0	0.8
2310 Rock St	-4	0	0	0	0	7.3	0.0	0.0	0.0	0.0	7.3
1001 N Shoreline Blvd	303	0	0	0	0	33.9	0.0	0.0	0.0	0.0	33.9
777 W Middlefield Rd	508	0	0	0	0	56.9	0.0	0.0	0.0	0.0	56.9
759 W Middlefield Rd	75	0	0	0	0	8.4	0.0	0.0	0.0	0.0	8.4
555 W Middlefield Rd	743	0	0	0	64,469	83.2	0.0	0.0	0.0	11.9	95.1
1696-1758 Villa St	207	0	0	0	0	22.8	0.0	0.0	0.0	0.0	22.8
360 S Shoreline Blvd	7	0	0	0	0	0.8	0.0	0.0	0.0	0.0	0.8
2645-2655 Fayette Dr	44	0	0	0	0	4.9	0.0	0.0	0.0	0.0	4.9

Table A-1 (continued): Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
1919-1933 Gamel Way & 574 Escuela Ave	53	0	0	0	0	5.9	0.0	0.0	0.0	0.0	5.9
525, 555, & 769 E Evelyn Ave	471	0	0	0	29,621	52.8	0.0	0.0	0.0	5.5	58.2
294-296 Tyrella Ave	13	0	0	0	0	3.3	0.0	0.0	0.0	0.0	3.3
1950 Montecito Ave	33	0	0	0	0	8.3	0.0	0.0	0.0	0.0	8.3
2010 San Ramon Ave	7	0	0	0	0	0.8	0.0	0.0	0.0	0.0	0.8
268 Ada Ave	2	0	0	0	0	0.5	0.0	0.0	0.0	0.0	0.5
286 W ECR	0	0	2,127	0	0	0.0	0.0	2.9	0.0	0.0	2.9
400 Logue Ave	367	0	0	0	0	41.1	0.0	0.0	0.0	0.0	41.1
465 Fairchild Dr	0	0	0	259,595	0	0.0	0.0	0.0	37.8	0.0	37.8
301-381 E Evelyn Ave	0	0	0	125,000	0	0.0	0.0	0.0	18.2	0.0	18.2
1860-2159 Landings Dr & 1014-1058 Huff Ave	0	0	0	803,004	0	0.0	0.0	0.0	116.9	0.0	116.9
189 N Bernardo Ave	0	0	0	27,760	0	0.0	0.0	0.0	4.0	0.0	4.0
303 Ravendale Dr	0	0	0	181,000	0	0.0	0.0	0.0	26.4	0.0	26.4

Table A-1 (continued): Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
1313 & 1347 W ECR	24	0	5,860	0	0	2.7	0.0	0.9	0.0	3.6	3.5
2005 Rock St	15	0	0	0	0	3.8	0.0	0.0	0.0	0.0	3.8
864 Hope St	2	0	0	0	0	0.1	0.0	0.0	0.0	0.0	0.1
Hope St Lots (Lots 4 and 8)	0	180	52,584	0	0	0.0	20.2	7.7	0.0	0.0	27.8
700 E Middlefield Rd	0	0	0	1,080,000	0	0.0	0.0	0.0	157.3	0.0	157.3
250 San Antonio Cir	0	0	3,350	0	0	0.0	0.0	0.5	0.0	0.0	0.5
2580 & 2590 California St/ 201 San Antonio Cir	632	0	-33,000	-70,000	0	70.8	0.0	-4.8	-7.1	0.0	58.9
2700 W ECR	211	0	2,000	0	0	23.6	0.0	0.3	0.0	0.0	23.9
2300 W ECR	0	157	0	0	0	0.0	17.6	0.0	0.0	0.0	17.6
840 E ECR	198	0	4,024	0	0	22.2	0.0	0.6	0.0	0.0	22.8
369 N Whisman Rd	0	0	0	180,773	0	0.0	0.0	0.0	26.3	0.0	26.3
231-235 Hope St	6	0	0	0	0	0.7	0.0	0.0	0.0	0.0	0.7
881 Castro St	14	0	8,500	0	0	1.6	0.0	1.2	0.0	0.0	2.8
2019 Leghorn St	-5	0	0	12,050	0	-0.6	0.0	0.0	1.2	0.0	0.7
858 Sierra Vista Ave	3	0	0	0	0	0.8	0.0	0.0	0.0	0.0	0.8

Table A-1 (continued): Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
410-414 Sierra Vista Ave	14	0	0	0	0	3.5	0.0	0.0	0.0	0.0	3.5
828 & 836 Sierra Vista Ave	15	0	0	0	0	3.8	0.0	0.0	0.0	0.0	3.8
315 & 319 Sierra Vista Ave	15	0	0	0	0	3.8	0.0	0.0	0.0	0.0	3.8
460 N Shoreline Blvd	50	0	0	0	0	5.6	0.0	0.0	0.0	0.0	5.6
1185 Terra Bella Ave	0	0	9,700	0	0	0.0	0.0	1.4	0.0	0.0	1.4
1075 Terra Bella Ave	0	0	0	19,301	0	0.0	0.0	0.0	1.9	0.0	1.9
870 Leong Dr	0	78	0	0	0	0.0	8.7	0.0	0.0	0.0	8.7
535 & 555 Walker Drive	58	0	0	0	0	14.6	0.0	0.0	0.0	0.0	14.6
186 E Middlefield Rd	8	0	0	0	0	0.9	0.0	0.0	0.0	0.0	0.9
167 N Whisman Rd	2	0	0	0	0	0.5	0.0	0.0	0.0	0.0	0.5
257-265 Calderon Ave	7	0	0	0	0	3.0	0.0	0.0	0.0	0.0	3.0
1958 Latham St	6	0	0	0	0	1.5	0.0	0.0	0.0	0.0	1.5
982 Bonita Ave	4	0	0	0	0	0.4	0.0	0.0	0.0	0.0	0.4
580-620 Clyde Ave	0	0	0	103,477	0	0.0	0.0	0.0	20.9	0.0	20.9
344 Bryant Ave	3	0	0	0	0	0.8	0.0	0.0	0.0	0.0	0.8

Table A-1 (continued): Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
1255 Pear Ave	635	0	0	284,014	0	71.1	0.0	0.0	49.5	0.0	120.6
2044 & 2054 Montecito Ave	52	0	0	0	0	13.1	0.0	0.0	0.0	0.0	13.1
333 N Rengstorff Ave	-1	0	0	0	0	4.2	0.0	0.0	0.0	0.0	4.2
2000 N Shoreline Blvd	0	0	0	595,000	0	0.0	0.0	0.0	86.6	0.0	86.6
1625 N Shoreline Blvd	0	200	0	-12,100	0	0.0	22.4	0.0	-1.2	0.0	21.2
1045-1085 La Avenida	0	0	0	643,000	0	0.0	0.0	0.0	93.6	0.0	93.6
400 San Antonio Rd	583	0	11,171	0	0	65.3	0.0	1.6	0.0	0.0	66.9
405 San Antonio Rd	0	167	107,835	360,909	0	0.0	18.7	15.7	52.6	0.0	87.0
2268 W ECR	204	0	0	-21,026	0	22.9	0.0	0.0	-2.1	0.0	20.7
1701 W ECR	67	0	0	0	0	7.5	0.0	0.0	0.0	0.0	7.5
86 W ECR	0	0	4,800	0	0	0.0	0.0	0.7	0.0	0.0	0.7
2025 & 2065 San Luis Ave	33	0	0	0	0	8.3	0.0	0.0	0.0	0.0	8.3
1998-2024 Montecito Ave	13	0	0	0	0	1.3	0.0	0.0	0.0	0.0	1.3
750 Moffett Blvd	0	255	0	200,000	0	0.0	28.6	0.0	29.1	0.0	57.7
660 Tyrella Ave	-15	0	0	0	0	3.5	0.0	0.0	0.0	0.0	3.5

Table A-1 (continued): Demands of Planned Projects

Address	Net Dwelling Units (DU)	Net Lodging Rooms	Net Mixed Use/Retail/ Restaurant Area (sf)	Net Office/ Ind. Area (sf)	Net Inst./ Rec. Area (sf)	Net Dwelling Demand (AFY)	Net Lodging Demand (AFY)	Net Mixed Use/Retail/ Restaurant Demand (AFY)	Net Office/ Ind. Area Demand (AFY)	Net Inst./Rec Demand (AFY)	Net Demand (AFY)
100 & 420-430 Ferguson Dr	198	0	0	0	120,226	49.9	0.0	0.0	0.0	22.2	72.1
500 Ferguson Dr	394	0	3,000	0	0	44.1	0.0	0.4	0.0	0.0	44.6
2296 Mora Dr	75	0	0	0	19,602	18.9	0.0	0.0	0.0	3.6	22.5
394 Ortega Ave	143	0	0	0	0	15.9	0.0	0.0	0.0	0.0	15.9
2500 Grant Rd	0	0	0	321,000	0	0.0	0.0	0.0	32.4	0.0	32.4
779 E Evelyn Ave	116	0	0	0	0	13.0	0.0	0.0	0.0	0.0	13.0
277 Fairchild Dr	22	0	0	0	0	5.5	0.0	0.0	0.0	0.0	5.5
100 & 420-430 Ferguson Dr	198	0	0	0	120,226	49.9	0.0	0.0	0.0	22.2	72.1

Notes:

1. *Projects based on City of Mountain View Planning Division Update July 2018.*
2. *Water demand based on the North Bayshore Precise Plan Phase II Duty Factors of 225 gpd/Dwelling Unit (DU) for Single Family, 100 gpd/DU for Multi-Family, 0.090 gpd/sf for Office, 0.130 gpd/sf for Research & Development, 0.130 gpd/sf for Retail, 0.060 gpd/sf for Industrial, 1.20 gpd/sf for Restaurant, 0.130 gpd/sf for Service, 100 gpd/room for Hotel, and 0.165 gpd/sf for Institutional/Recreational. Water demand for Mixed Use based on 2010 Water Master Plan Unit Duty Factor of 0.130 gpd/sf.*

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Appendix C: City of Mountain View Council Resolution Approving the Water Supply Assessment for the East Whisman Precise Plan