Attachment 2

CITY OF MOUNTAIN VIEW
2015 URBAN WATER MANAGEMENT PLAN

ADDENDUM NO. 1
September 12, 2017

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1. INTRODUCTION

The City of Mountain View has prepared this addendum to its 2015 Urban Water Management Plan (UWMP) to document a recent water supply transfer to the City of East Palo Alto. In May 2017, the Mountain View City Council agreed to transfer 1.0 million gallons per day (MGD) of its water supply rights from the San Francisco Regional Water System to East Palo Alto. The estimated impacts of this transfer were analyzed and discussed prior to its approval, and are presented here to document the water transfer in the City's UWMP. Background information about Mountain View's water system is presented in the existing 2015 UWMP and supplemented below with information relevant to the transfer. Individuals preparing water supply assessments and other water planning documents shall rely upon this updated information for their water supply analyses.

2. SUPPLEMENTAL BACKGROUND INFORMATION

2.1 San Francisco Water Supply Agreement

The majority of Mountain View's drinking water comes from the San Francisco Public Utilities Commission (SFPUC) Regional Water System. The current contract governing Mountain View's water purchases was signed by the City, SFPUC, and 26 other wholesale water customers in 2009. This 25-year term Supply Agreement provides 184 MGD of water to the wholesale customers during normal water years, allocated according to the individual supply guarantees (Individual Guarantee) of each agency. The agreement also requires agencies with secondary sources of imported water to guarantee purchase of a minimum volume from SFPUC during normal water years. Mountain View is one of four such agencies, the others being Sunnyvale, Milpitas and the Alameda County Water District. Two agencies, Santa Clara and San Jose, operate on an "interruptible" status and do not currently have long term individual guarantees. One agency, Hayward, has no maximum guarantee.

Mountain View's Individual Guarantee prior to the recent water transfer to East Palo Alto was 13.46 MGD, and is now 12.46 MGD. East Palo Alto's Individual Guarantee

prior to the transfer was 1.963 MGD, and is now 2.963 MGD. The City's minimum purchase requirement is 8.93 MGD, which is not affected by the water transfer.

2.2 City of Mountain View

The City's use of SFPUC water varies annually, with peak use in Fiscal Year 1986-87 of 13.5 MGD, compared to 6.78 MGD in Fiscal Year 2015-16. Over the last three decades water use has decreased as a result of changes in industry, plumbing efficiencies, conservation programs, and recycled water use. In recent years consumption has been further decreased by conservation in response to the drought. Mountain View's water consumption has not come within 1.0 MGD of the supply guarantee since the late 1980s.

In Fiscal Years 2010-11 and 2011-12, the City paid SFPUC a total of $444,000 to satisfy the minimum purchase requirements, even though the water was not used. Although the City's consumption was below its minimum purchase requirement in Fiscal Years 2014-15, 2015-16 and 2016-17, SFPUC waived the minimum purchase requirement in response to drought-related requests to conserve water. Based on improved water supply conditions, SFPUC intends to resume charging the City for its minimum required purchase Fiscal Year 2017-18. Staff estimates the City's exposure for the minimum purchase costs of water is $8.5 million over the next four years, after which staff anticipates purchases will exceed the minimum purchase quantity.

2.3 City of East Palo Alto

The City of East Palo Alto is located in San Mateo County approximately 5 miles north-west of Mountain View. The SFPUC is East Palo Alto's only source of drinking water. Over the past 14 years, East Palo Alto's water use has averaged 95 percent of its supply guarantee, and in some years has exceeded it. East Palo Alto's 2035 General Plan estimates that new public and private development could increase water use by 75 percent over the next 25 years. In July 2016, the East Palo Alto City Council adopted a moratorium on new or expanded water service connections (and, therefore, new development projects) because consumption was close to their contractual supply limit. East Palo Alto began investigating opportunities for new supplies, including rehabilitation of two unused groundwater wells, supply transfers within the SFPUC

Regional Water System, and increased conservation (despite their already low per capita use). East Palo Alto set a target of acquiring 1.5 MGD in additional permanent supplies to satisfy their projected growth. Included in the list of development projects on-hold due to East Palo Alto's moratorium are a 500-student school that would provide comprehensive support services for students from East Palo Alto and Belle Haven, and an affordable housing project of 120 units on City-owned land.

East Palo Alto staff contacted Mountain View in 2015 regarding a possible water supply transfer. Mountain View staff analyzed the potential impacts of a water transfer and how various quantities would impact the City's ability to meet future water needs. The estimated cost of not meeting the minimum purchase requirement was also analyzed.

2.4 Terms of Transfer Agreement

Following negotiations between staff from Mountain View and East Palo Alto, and approval from both City Councils and the SFPUC, terms of the transfer were agreed upon and approved in May/June 2017. Mountain View agreed to permanently transfer 1.0 MGD of its SFPUC supply guarantee to East Palo Alto in exchange for a onetime payment of $5 million.

3.0 CHANGES TO THE 2015 UWMP

Key sections of the UWMP analyzed by staff for impacts from the water transfer are:

- **Section 5.6: Projected Water Supply Availability and Production**
- Section 6.6 Estimated Minimum Three-Year Supply
- Section 6-7: Water Demand and Supply Comparison
- **Section 6.8 Ability to meet Demand of Higher-Growth Alternative**

Of these four sections, only two (shown in bold above) require updating as a result of the water transfer. Each of these sections is discussed below. Updated tables are provided as attachments to this addendum.

3.1 Projected Water Supply Availability and Production (UWMP Section 5.6)

Section 5.6 of the UWMP is affected by the water supply transfer. The transfer to East Palo Alto has decreased Mountain View's maximum available water supply by 1,100 acre-feet per year (AFY), reducing the City's SFPUC maximum supply from 15,078 AFY to 13,955 AFY. Of the two tables included in UWMP Section 5.6 only one, bolded below, requires updating due to the transfer agreement.

- **Table 5-4: Estimated Maximum Available Water Supply**
- Table 5-5: Projected Water Supply Production

Updates to Table 5-4 has are shown in Attachment 1 to reflect the water supply transfer. Table 5-5 is not affected by the transfer and remains unchanged.

3.2 Estimated Minimum Three-Year Supply (UWMP Section 6.6)

Section 6.6 of the UWMP is not affected by the water supply transfer. Table 6-2: Estimated Minimum Three-Year Supply is also not affected and remains unchanged.

3.3 Water Demand and Supply Comparison (UWMP Section 6.7)

Section 6.7 of the UWMP is not affected by the water supply transfer.

The water demand and supply comparison presented in the 2015 UWMP analyzes the City's ability to meet projected water demand under normal water year, single dry year, and multiple dry year conditions. Demand projections were based on then Council-approved land use policies, including the 2030 General Plan and adopted precise plans. Reducing the maximum available supply does not change the City's estimated ability to meet water demand from currently adopted land use policies under normal or dry year conditions. As such, several seemingly relevant tables in Section 6.7 are not affected by the supply transfer and therefore not updated herein. These tables include:

- Table 6-2 Estimated Minimum Three-Year Supply
- Table 6-3: Normal Year Supply and Demand Comparison
- Table 6-4: Single Dry-Year Supply and Demand Comparison
- Table 6-5: Multiple Dry-Year Supply and Demand Comparison

3.4 Ability to Meet Demand of Higher-Growth Alternative (UWMP Section 6.8)

Section 6.8 of the UWMP is affected by the water supply transfer.

Section 6.8 of the UWMP presents alternative demand projections assuming approval of several new land use policies being studied outside of the adopted 2030 General Plan and precise plans. Key amongst these policies are additional housing in North Bayshore (up to 10,000 dwelling units) and projects located on Moffett Boulevard (Shenandoah), Middlefield Road, Shoreline Boulevard, east Evelyn Avenue, Villa Street, and in the East Whisman area. This "higher-growth" analysis provides a conservative analysis of cumulative impacts from all pending policies. Detailed analyses associated with each proposed land use change are being (or will be) studied as part of the individual project environmental review process. The estimated cumulative impact of the higher-growth alternative is a 79 percent increase in population, a 38 percent increase in jobs, and an 87 increase in water use (compared to 2015).

As a result of the water supply transfer staff has updated the UWMP analysis of supply sufficiency and estimated the following water supply shortfalls (shown in comparison to pre-transfer estimates).

- Normal Year—No shortfalls through 2030; possible 4 percent shortfall in 2040. *(Change from UWMP, which estimated no shortfalls through 2040)*

- Single Dry Years—A shortfall of 2 percent in 2020, increasing to 25 percent shortfall in 2040. *(No change from UWMP)*

- Multiple Dry Years—Shortfalls up to 5 percent in 2020, increasing to 11-26 percent in 2040. *(Change from UWMP, which estimated shortfalls up to 5 percent in 2020, increasing to 9-26 percent in 2040)*[1]

It is worth noting that the higher-growth alternative analysis was not used as the City's official water demand estimates because it included land use policies currently under

[1] Errata: An error on page 71 of the UWMP overestimated the Higher-Growth Alternative multiple dry year shortfalls as "11-13 percent in 2020 increasing to 24-26 percent in 2040". These numbers should have read "0-5 percent in 2020 increasing to 9-26 percent in 2040" but were erroneously reported due to a calculation error.

study, however staff felt it was important to discuss the possible cumulative impacts of these policies given that the next UWMP will not be prepared until 2020.

Additional factors influencing potable water use include long-term conservation and recycled water use. Since adoption of the 2015 UWMP in June 2016 Mountain View has implemented a mandatory dual-plumbing requirement for new buildings over 25,000 square feet. This new requirement is expected to further increase recycled water use and reduce demand on the potable water system, above and beyond what was estimated in the 2015 UWMP.

3.5 Changes to Appendix D

Appendix D of the UWMP includes tables required by the California Department of Water Resources. The recent water supply transfer necessitates updating only one of these tables, included as Attachment 2 to this report. All other appendices remain unchanged.

4.0 CONCLUSION

Based on the analysis completed for the water supply transfer to East Palo Alto, presented in this UWMP addendum, staff does not anticipate the transfer will substantially impact the City's ability to meet future water needs. Updates to the UWMP are relatively minor and various other factors are likely to have a greater influence on the City's future water needs (e.g., land use policies, recycled water policies, conservation programs).

Attachment 1 – Updated UWMP Table 5-4

Table 5-4: Estimated Maximum Available Water Supply

Supply Source	Estimated Maximum Available Supply (AFY)	Basis
SFPUC	~~15,078~~ 13,955	Individual Supply guarantee
SCVWD Treated	1,200	7-year projections
Groundwater	1,525	20-year historical maximum
Recycled Water	3,361	Capacity ownership
Total Supply	~~21,164~~ 20,041	–

**Original values are shown in strikeout, for comparison.*

Attachment 2 – Updated Appendix D Table 6-8

Table 6-8 Retail: Water Supplies — Actual				
Water Supply	Additional Detail on Water Supply	2015		
Drop down list *May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool*		Actual Volume	Water Quality *Drop Down List*	Total Right or Safe Yield *(optional)*
Add additional rows as needed				
Purchased or Imported Water	San Francisco Public Utilities Commission	8,043	Drinking Water	~~15,078~~ 13,955
Purchased or Imported Water	Santa Clara Valley Water District	682	Drinking Water	1,200
Groundwater	Santa Clara Valley Groundwater Basin	145	Drinking Water	1,525
Recycled Water	Regional Water Quality Control Plant	450	Recycled Water	3,361
	Total	9,320		~~21,164~~ 20,041
NOTES:				

**Original values are shown in strikeout, for comparison.*