$Appendix \ M-Water \ Supply \ Assessment$



Water Supply Assessment for 620 Airport Boulevard

The City of Burlingame

November 2022

Water Supply Assessment

620 Airport Boulevard City of Burlingame

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1 INTRODUCTION

The Water Supply Assessment law (§10910-10915 of the California Water Code [CWC or Water Code]) requires urban water supplies to prepare a Water Supply Assessment (WSA) to the city or county that has jurisdiction to approve the environmental documentation for certain qualifying projects as defined in Water Code §10912(a). This WSA was prepared for the proposed 620 Airport Boulevard development ("Project"). The proposed Project meets the definition of "project" as defined in Water Code §10912(a)(e) because it includes a commercial office building employing more than 1,000 persons or having more than 250,000 square feet (sq ft) of floor space. The proposed Project consists of two multi-story office and research and development (R&D) buildings, parking, and associated irrigated landscaping (Vassar Properties, 2022; Appendix C). The City of Burlingame (City) will be the water service provider for the proposed Project.

The information provided in this WSA is consistent with Water Code §10910-10912 requirements and the California Department of Water Resources' (DWR's) *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001: To Assist Water Suppliers, Cities, and Counties in Integrating Water and Land Use Planning*, dated 8 October 2003.

The purpose of this WSA is to evaluate whether the City has sufficient water supply to meet the current and planned water demands within its service area, including the demands associated with the proposed Project, during normal and dry hydrologic years over a 20-year time horizon. More specifically, this WSA includes:

- A summary of the WSA requirements articulated in Water Code §10910-10912 and a description of how they apply to the proposed Project (Sections 2 and 3);
- A description and analysis of the current and projected future water demands of the proposed Project through the year 2045 (Section 4);
- A description and analysis of the historical and current water demands for the City, and projected future water demands for its service area through the year 2045 (Section 5);
- A description and analysis of the current and projected future water supplies for the City's service area through the year 2045 (Section 6); and
- A comparison of the water supplies and demands for the City's service area, including the projected water demands associated with the proposed Project (Section 7).

The information contained in this WSA is based primarily on the City's 2020 Urban Water Management Plan (UWMP), except where updated with relevant water demand and supply reliability and other information provided by DWR, the San Francisco Public Utilities Commission (SFPUC), the Bay Area Water Supply and Conservation Agency (BAWSCA), and the City (City of Burlingame, 2022a; 2022b).

1.1 WSA Determination

A significant source of uncertainty identified in the City's 2020 UWMP and this WSA is whether

the Water Quality Control Plan for the San Francisco/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment)¹ will be implemented and how it will affect the supply reliability of the City and County of San Francisco's Regional Water System (RWS), which is the City's sole source of supply. Given this uncertainty, and based on information provided by the SFPUC and BAWSCA, this WSA analyzes water supply and demands through 2045 under three scenarios:

- 1. Scenario 1: Implementation of the Bay-Delta Plan Amendment
- 2. Scenario 2: Without implementation of the Bay-Delta Plan Amendment
- 3. Scenario 3: Implementation of the Proposed Voluntary Agreement

Scenario 1 (Implementation of the Bay-Delta Plan Amendment): With the implementation of the Bay-Delta Plan Amendment, the City has sufficient water supply to meet all of its expected future water demands, including the demands of the proposed Project, in normal years. In dry years, the City will implement its Water Shortage Contingency Plan (WSCP) and apply the appropriate water demand reduction actions in order to ensure demand is met. Regardless of whether the proposed Project is constructed, as described in the City's adopted 2020 UWMP and in Section 6.2.1 herein, with implementation of the Bay-Delta Plan Amendment, the City is projecting supply shortfalls of up to 45% during single dry years and up to 53% during multiple dry years in 2045 and will require significant demand reductions or the development of alternative water supply sources. The City is working independently and with the other BAWSCA agencies to identify mitigation measures to improve the reliability of regional and local water supplies and to meet its customers' water needs. If conditions for large drought cutbacks to the RWS supplies persist, the City will need to implement additional demand reduction actions, invoke strict restrictions on potable water use, and accelerate efforts to develop alternative supplies of water.

<u>Scenario 2 (Without Implementation of the Bay-Delta Plan Amendment)</u>: Without the implementation of the Bay-Delta Plan Amendment, the City has sufficient water supply to meet all of its future water demands, including the demands of the proposed Project, in normal years, single dry years, and most multiple dry years. As discussed in Section 6.2.3 herein, it is anticipated that the City will face supply shortfalls of 14% during the 4th and 5th years of a multiple-year drought in 2045, during which the City would have to implement its WSCP to curtail demands and ensure that its supplies remain sufficient to serve all users, including those of the proposed Project.

<u>Scenario 3 (Voluntary Agreement)</u>: The SFPUC is in active negotiations with the State to see if a compromise can be reached wherein the impacts of the Bay-Delta Plan Amendment to the RWS can be minimized. Under this scenario, the City is assumed to have sufficient water to meet all of its future water demands, including the demands of the proposed Project, in normal years. It is

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¹ On December 12, 2018, through State Water Board Resolution 2018-0059, the State Water Board amended the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan). It adopted the amendments to the Bay-Delta Plan and the Final SED establishing the Lower San Joaquin River flow objectives and revised southern Delta salinity objectives. On February 25, 2019, the Office of Administrative Law approved the Bay-Delta Plan amendments, which are now in effect.

anticipated that, in single and multiple dry year scenarios, the City would implement its WSCP to curtail demands and ensure that its supplies remain sufficient to serve all users, including the proposed Project. This scenario is based on the assumption that demand will not be curtailed beyond the SFPUC Level of Service (LOS) goal of not exceeding 20% system wide rationing.

Additionally, based on the uncertainty of future water supplies, the City Public Works Department recommends the following Project-specific measures to increase resiliency. If any of these recommendations are found to be infeasible, the Project applicant may submit a technical analysis to the Public Works Director for review:

- 1. Install purple piping in the frontage of the Project site for future recycled water usage;
- 2. Follow the Prescriptive Compliance Option of the Model Water Efficient Landscaping Ordinance, see California Code of Regulations Title 23, Chapter 2.7, Appendix D²;
- 3. Install 100% WaterSense labeled products, as available; and
- 4. Under Leadership in Energy and Environmental Design (LEED) certification, incorporate a minimum of four points under the Water Efficiency credit category³.

This WSA concludes that, because the proposed Project was included in the City's 2020 UWMP and the City's 2022 water demand projections update, it will not affect water supply reliability within the City's service area beyond what has been projected. Based on currently available information, the City expects to be able to meet all future demands within its service area inclusive of the proposed Project in normal hydrologic years and dry years. The shortfalls that are currently projected during dry years will be addressed through planned implementation of the City's 2020 WSCP⁴. In addition, as described herein and in the City's 2020 UWMP, the City, BAWSCA, and SFPUC are pursuing the development of additional water supplies and mitigation measures to improve the RWS and local supply reliability.

1.2 WSA Approval

Approval of this WSA by the Burlingame City Council is not equivalent to approval of the development project for which the WSA is prepared. A WSA is an informational document required to be prepared for use in the City's environmental review of a project under the California Environmental Quality Act (CEQA). Furthermore, this WSA does not verify the adequacy of existing distribution system capacity to serve the proposed Project.

https://www.usgbc.org/credits?Category=%22Water+efficiency%22

https://www.burlingame.org/document center/Water/CityofBurlingame 2020 UWMP.pdf

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² The California Code of Regulations Title 23, Chapter 2.7, Appendix D can be found online here.

³ A list of LEED credits for water efficiency is available at

⁴ The City's 2020 WSCP is available at

2 GENERAL REQUIREMENTS FOR A WATER SUPPLY ASSESSMENT

The purpose of this section is to outline the types of projects that require the preparation of a WSA, who is responsible for preparation, and the necessary components of a WSA.

2.1 Applicability of California Water Code to the Project

As described in detail in Section 3, the proposed Project meets the definition of "project" as defined in Water Code §10912(a) and §10912 (e) because it includes a commercial office building employing more than 1,000 persons or having more than 250,000 sq ft of floor space.

2.2 Responsibility for Preparation of the Water Supply Assessment

The proposed Project is located within the City's service area (**Figure 1**) and the water for the proposed Project will be supplied by the City. Therefore, in accordance with Water Code §10910(b), the City is the entity responsible for preparation and adoption of a WSA for the proposed Project.

2.3 Purpose of a Water Supply Assessment

Per Water Code §10910(c)(4), the primary purpose of a WSA is to evaluate whether sufficient water supply is available to meet all future demands within the water supplier's service area, including those associated with the proposed Project, during normal and dry hydrologic years for a 20-year planning horizon.

3 PROJECT DESCRIPTION

The proposed Project is located on assessor's parcel number (APN) 026-342-330, which is bounded to the north by the Anza Lagoon and to the south by Airport Boulevard (Figure 2). The approximately 3.7-acre development includes two multi-story, approximately 793,010 sq ft office and R&D buildings. In total, the two buildings will comprise approximately 193,352 sq ft of office use and 290,028 of R&D use (Vassar Properties, 2022; Appendix C). The Project also consists of approximately 309,630 sq ft of associated parking and 62,532 sq ft of landscaped area (Appendix A). Construction is anticipated to be complete by 2026 (Vassar Properties, 2022; Appendix C).

As shown on **Figure 2**, the proposed Project site is currently occupied by an outdoor parking lot. Historical water use at the site ranged between 0.13 to 0.33 MG between 2017 and 2021 (City of Burlingame, 2022a). The proposed Project is located within the City's service area and potable water service to the proposed Project will be provided by the City.

4 PROJECT WATER DEMAND

The City has adopted green building standards and water efficient landscaping ordinances consistent with previous versions of the CalGreen building standards and the California Model

Water Efficient Landscape Ordinance (MWELO) and all new developments must comply with these efficiency standards. As discussed in Section 1, based on the uncertainty of future water supplies, the proposed Project is highly recommended to implement the following water conservation measures to increase water resiliency:

- Install purple piping in the frontage of the proposed Project site for future recycled water usage;
- 2. Follow the Prescriptive Compliance Option of MWELO, see California Code of Regulations Title 23, Chapter 2.7, Appendix D⁵;
- 3. Install 100% WaterSense labeled products, as available; and
- 4. Under LEED certification, incorporate a minimum of four points under the Water Efficiency credit category⁶.

If these recommendations are found to be infeasible, the Project applicant may submit a technical analysis to the Public Works Director for review. For purposes of this analysis, these conservation measures are not considered in the calculations and assumptions provided herein.

As described below, average annual water demand for the proposed Project was estimated based on: (1) information provided by the Project Proponent in coordination with the City (Vassar Properties, 2022; **Appendix C**); and (2) water demand factors identified in literature and other public sources for similar land uses. Total water demands include water used by the proposed Project for office uses, R&D uses, landscaping, and parking structure cleaning.

Table 1 includes a summary of the water demand projections associated with the proposed land uses, in five-year increments through 2045. Full project buildout will be achieved by 2026 (Vassar Properties, 2022; **Appendix C**). **Table 1** also provides a summary of the land uses, unit water demand factors, and respective water demand associated with each land use.

4.1 Office and R&D Use

Approximately 193,352 sq ft of office use and 290,028 sq ft of R&D use is anticipated for the proposed Project (Vassar Properties, 2022; **Appendix C**). It is noted that water use by R&D varies significantly based on the specific operations of the facility. In absence of specific information regarding facility water uses, the water demand for the R&D use is estimated based on a demand factor of 0.18 gallons per day per square foot (GPD/sq ft), based on information from the Draft Environmental Impact Report (EIR) for the Genentech Campus Master Plan Update (Genentech, 2019) ⁷. For the office use portion of the proposed Project, an office demand factor of 0.055 GPD/sq ft was used, per Genentech (2019). Based on the demand factors identified above,

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⁵ The California Code of Regulations Title 23, Chapter 2.7, Appendix D can be found online here.

⁶ A list of LEED credits for water efficiency is available at https://www.usgbc.org/credits?Category=%22Water+efficiency%22

⁷ The R&D demand factor was calculated by dividing the total water use of the Genentech campus in 2016 by the total area of the campus to estimate demand per area.

the total estimated office space water use for the proposed Project is estimated to be 3.9 million gallons per year (MGY), and the total estimated R&D use is estimated to be 19 MGY.

4.1 Garage Structure Water Use

The proposed Project includes a two-level, approximately 309,630 sq ft partially below-grade parking structure (Vassar Properties, 2022; **Appendix C**). Water use associated with this space is anticipated to be minimal, limited to cleaning of the facility. For purposes of this WSA, it is assumed that the garage will be cleaned 12 times per year and that 0.02 gallons per sq ft will be used per each cleaning event (City of Los Angeles Bureau of Engineering, 2012). Thus, it is estimated that 0.07 MGY will be used for purposes of cleaning the parking garage.

4.2 Outdoor Water Use

Per Vassar Properties, the proposed Project includes a total of 62,532 sq ft⁸ of landscaped area (**Appendix A**). As shown in **Table 2**, Irrigated landscape water use was calculated based on the Maximum Applied Water Allowance (MAWA) per the City's Water Conservation in Landscape Ordinance (City of Burlingame, Water Conservation in Landscape Ch 18.17)⁹. Based on this methodology, it is estimated that the total irrigated landscape water use for the Proposed Project will be 0.75 MGY.¹⁰

4.3 Total Project Water Demand

Historical water use for the current land use at the proposed Project site over the last five years (i.e., 2017 – 2021) ranged between 0.13 and 0.33 MGY, and averaged 0.22 MGY (City of Burlingame, 2022a). Thus, based on the above methodologies and assumptions, and adjusting for the existing water use at the site, the incremental increase in water demand associated with the proposed Project at full buildout and occupancy is estimated to be 24 MGY, as shown in **Table 1**. However, as discussed in Section 5.1, the proposed Project is included in the City's 2020 UWMP water demand projections and the City's 2022 water demand projections update, and is therefore not expected to result in an on-going net increase in water demands to the City beyond what has already been projected.

5 CITY OF BURLINGAME WATER DEMAND

Consistent with the UWMP Act (Water Code §10610-10656), the 2020 UWMP for the City presents estimates of projected future water demand for the City's service area in five-year increments, between the years 2025 and 2045 (City of Burlingame, 2021).

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⁸ The landscaped area consists of landscape irrigation and an irrigated green roof.

⁹ The City of Burlingame Municipal Code is available at https://library.qcode.us/lib/burlingame_ca/pub/municipal_code/item/title_18-chapter_18_17-18_17_090

¹⁰ MAWA demands were calculated by multiplying the Reference Evapotranspiration rate of 42.8 inches per year for Redwood City, an Evapotranspiration Adjustment Factor of .45 for non-residential areas, a conversion factor of .62, and the total project square footage, for a total of .30 MG.

5.1 Review of Project's Inclusion in 2020 UWMP Growth Projections

The City's 2020 UWMP water demand projections account for growth projected within the City's 2019 General Plan (City of Burlingame, 2019). As part of this WSA, the City conducted an update to its water demand projections using its Demand Management Decision Support System Model (DSS Model) to incorporate the additional residential water demand associated with the Regional Housing Needs Allocation (RHNA; ABAG, 2022) and the City's ongoing Housing Element update. The DSS Model projects an increase in commercial and industrial water use of 145 MGY from 2025 through 2045. Given that the proposed Project is projected to use 24 MGY at full buildout, representing 17% of the projected commercial and industrial demand increase for the City, the Project is considered to be included within the demand projections of the City. Therefore, the proposed Project is not anticipated to result in an increase in demands for the City relative to those projected in the City's 2020 UWMP and the City's 2022 water demand projections update.

5.2 Current and Historical Water Demand Within the City of Burlingame Service Area

Historical water demand within the City service area from fiscal years 2005 through 2022 is summarized in **Table 3.** Total City water demand has decreased by approximately 28% between 2005 and 2022 and averaged 1,238 MGY over the past five years, i.e., from 2018 through 2022. Water use from 2005 to 2008 within the City remained fairly consistent, at an average of 1,634 MGY. Water demand decreased approximately 13% between 2008 and 2010, which generally corresponds with the 2007 to 2009 drought and the economic downturn. Then, a significant drop in water demand occurred between 2014 and 2016, corresponding to the recent historic drought and mandatory state-wide water use restrictions and water conservation targets. Since 2016, water use has rebounded but has not returned to pre-drought levels.

The largest proportion of water demand within the City service area is from the single-family residential (SFR) sector, which represented 42% of the demand in the 2017-2021 period. The remainder of the demand is split between multi-family residential (MFR) (19% of overall demand), commercial (13% of the overall demand), industrial (12% of overall demand), losses (5.6% of overall demand), landscape (5.2% of overall demand), and institutional/governmental (2.8% of the overall demand) (City of Burlingame, 2021).

5.3 The City of Burlingame's Water Demand Projections

As part of this WSA, the City updated its water demand projections to reflect the City's ongoing Housing Element update and assigned RHNA development values. The RHNA anticipated allocation to the City is 3,257 residential units, which is a larger number of units than those projected in the City's 2019 General Plan and those incorporated in the City's 2020 UWMP. The City is currently revising its Housing Element to accommodate its RNHA values. The updated demand values incorporating the City's RHNA, which include both passive and active conservation savings, are presented in **Table 4** in five-year increments. Also considering historical water use, expected population increase and other growth, climatic variability, and other assumptions, the water demand within the City is projected to increase to 1,697 MGY by 2045, an increase of approximately 28% compared to the 2018-2022 average.

5.4 Total Projected City of Burlingame Water Demand (Inclusive of Proposed Project)

Table 4 also shows the projected water demands for the City inclusive of the estimated proposed Project water demands. Because the proposed Project is included in the City's 2020 UWMP water demand projections and the City's 2022 water demand projections update, development of the proposed Project is not anticipated to affect water demands and supply reliability for the City beyond what was already projected in the adopted 2020 UWMP.

The City recently approved two WSAs on September 19, 2022, where the water demand for the proposed projects was similarly accounted for in the City's demand projections. It is noted that another development project is in early stages of entitlement and has also requested a WSA from the City. The City is currently evaluating which, if any, components of this project are already accounted for within the City's demand projections. The demands of this project and any associated impacts on the City's demands and supply reliability will be addressed in the subsequent WSA.

6 THE CITY OF BURLINGAME'S WATER SUPPLY

This section identifies the City's water supply and discusses the vulnerability of the City's supply to drought and other factors affecting water supply reliability.

6.1 Identification of Water Supply Rights

Pursuant to Water Code §10910(d)(1), a WSA is required to include identification of all water supply entitlements, water rights, and water service contracts relevant to the identified water supply for the proposed Project. In accordance with these requirements, this WSA includes a summary of the City's supply sources and the agreements between the City and its wholesale supplier, the SFPUC, and other parties. The primary source of this information is the City's 2020 UWMP and information provided by BAWSCA and SFPUC in support of the development of the SFPUC customer agencies' 2020 UWMPs.

6.1.1 SFPUC Regional Water System

6.1.1.1 RWS Supply Sources and Allocation

As shown in **Table 5**, the singular source of water supply to the City is treated water purchased from the City and County of San Francisco's RWS, which is operated by the SFPUC (City of Burlingame, 2021).

The RWS supply originates predominantly from the Sierra Nevada but also includes treated water produced by the SFPUC from its local watersheds and facilities in Alameda and San Mateo Counties. Approximately 85% of the RWS supply is from the Tuolumne River via the Hetch Hetchy Reservoir and aqueducts. The City's RWS supply is sourced from the remaining 15%, which is derived from local watersheds and the San Antonio, Calaveras, Crystal Springs, Pilarcitos, and San Andreas Reservoirs.

The business relationship between the City and County of San Francisco and its Wholesale Customers (including the City) is largely defined by the Water Supply Agreement¹¹ between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County (Agreement) entered into in July 2009. The Agreement, which has a 25-year term, addresses water supply availability for the RWS as well as the methodology used by the SFPUC in setting wholesale water rates. This Agreement supersedes an earlier 25-year agreement signed in 1984, and was most recently amended in 2018 (SFPUC, 2018). The amendments included extending the deadline for SFPUC to decide whether to make San Jose and Santa Clara permanent customers, a revision to the drought allocation formula, and a deadline extension for completion of its Water Supply Improvement Plan, among other things.

The Agreement provides a 184 million gallons per day (MGD) Supply Assurance to the SFPUC's Wholesale Customers collectively (City of Burlingame, 2021). Each wholesale customer's share of the 184 MGD is referred to as their Individual Supply Guarantee (ISG). The City's ISG is 5.23 MGD, or approximately 1,909 MGY (City of Burlingame, 2021). Although the Agreement expires in 2034, the Supply Assurance and ISG continue in perpetuity as both are subject to separate binding water allocation agreements described above and would continue beyond the term of the Agreement. At expiration of the Agreement, it is likely that a new agreement will be entered into as was done at the termination of the prior 1984 agreement.

Information regarding the Agreement and subsequent amendments was provided by BAWSCA and SFPUC in support of 2020 UWMP development and is provided verbatim below.

In the 2009 Water Supply Agreement, the SFPUC committed to make three decisions before 2018 that affect water supply development:

- Whether or not to make the cities of San Jose and Santa Clara permanent customers,
- Whether or not to supply the additional unmet supply needs of the Wholesale Customers beyond 2018, and
- Whether or not to increase the wholesale customer Supply Assurance above 184 MGD.

Events since 2009 made it difficult for the SFPUC to conduct the necessary water supply planning and CEQA analysis required to make these three decisions before 2018. Therefore, in the 2018 Amended and Restated Water Supply Agreement, the decisions were deferred for 10 years to 2028.

Additionally, there have been recent changes to instream flow requirements and customer demand projections that have affected water supply planning beyond 2018. As a result, the SFPUC has established an Alternative Water Supply Planning program to evaluate several regional and local water supply options. Through this program, the

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¹¹ Water Supply Agreement between the City and County of San Francisco and Wholesale Customers is available at https://bawsca.org/water/reliability

SFPUC will conduct feasibility studies and develop an Alternative Water Supply Plan by July 2023 to support the continued development of water supplies to meet future needs.

The City's current and projected purchase quantities are approximately equal to 1,271 MG in 2020 and 1,697 MG in 2045, respectively (City of Burlingame, 2021). Both current and projected quantities are less than the City's ISG of 1,909 MGY.

6.1.1.2 RWS Supply Reliability

The RWS has historically met demand in its service area in all year types. Factors that will affect future reliability of the RWS are discussed below. Detailed information regarding factors that impact the SFPUC RWS supply reliability are provided in the City's 2020 UWMP (City of Burlingame, 2021).

The water available to SFPUC's Retail and Wholesale Customers from the RWS is constrained by hydrology, physical facilities, and the institutional parameters that allocate the water supply of the Tuolumne River (SFPUC, 2021). In addition, statewide regulations and other factors can impact the system reliability. For example, the adoption of the Bay-Delta Plan Amendment is anticipated to impact the reliability of the RWS supplies in the future.

If the current Bay-Delta Plan Amendment (July 2018) is implemented, the proposed unimpaired flow volumes would significantly reduce water supply available through the RWS during future drought condition. The City would be required to reduce their water use by as much as 53% during multi-year droughts (City of Burlingame, 2021) if no new additional imported or local supplies are developed by the SFPUC or the Wholesale Customers.

In support of 2020 UWMP development, SFPUC provided a detailed discussion of the factors contributing to the significant uncertainties surrounding the Bay-Delta Plan Amendment. This discussion is excerpted below:

In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 30-50% of the "unimpaired flow" ¹² on the three tributaries from February through June in every year type. In SFPUC modeling of the new flow standard, it is assumed that the required release is 40% of unimpaired flow.

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¹² "Unimpaired flow represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds." (Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Dec. 12, 2018) p.17, fn. 14, available at: https://www.waterboards.ca.gov/plans policies/docs/2018wqcp.pdf.)

If the Bay-Delta Plan Amendment is implemented, the SFPUC will be able to meet the projected water demands presented in this Urban Water Management Plan (UWMP) in normal years but would experience supply shortages in single dry years or multiple dry years. Implementation of the Bay-Delta Plan Amendment will require rationing in all single dry years and multiple dry years. The SFPUC has initiated an Alternative Water Supply Planning Program (AWSP) to ensure that San Francisco can meet its Retail and Wholesale Customer water needs, address projected dry years shortages, and limit rationing to a maximum 20 percent system-wide in accordance with adopted SFPUC policies. This program is in early planning stages and is intended to meet future water supply challenges and vulnerabilities such as environmental flow needs and other regulatory changes; earthquakes, disasters, and emergencies; increases in population and employment; and climate change. As the region faces future challenges – both known and unknown – the SFPUC is considering this suite of diverse non-traditional supplies and leveraging regional partnerships to meet Retail and Wholesale Customer needs through 2045.

The SWRCB has stated that it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, assuming all required approvals are obtained by that time. But implementation of the Plan Amendment is uncertain for multiple reasons.

First, since adoption of the Bay-Delta Plan Amendment, over a dozen lawsuits have been filed in both state and federal courts, challenging the SWRCB's adoption of the Bay-Delta Plan Amendment, including a legal challenge filed by the federal government, at the request of the U.S. Department of Interior, Bureau of Reclamation. This litigation is in the early stages and there have been no dispositive court rulings as of this date.

Second, the Bay-Delta Plan Amendment is not self-implementing and does not automatically allocate responsibility for meeting its new flow requirements to the SFPUC or any other water rights holders. Rather, the Bay-Delta Plan Amendment merely provides a regulatory framework for flow allocation, which must be accomplished by other regulatory and/or adjudicatory proceedings, such as a comprehensive water rights adjudication or, in the case of the Tuolumne River, may be implemented through the water quality certification process set forth in section 401 of the Clean Water Act as part of the Federal Energy Regulatory Commission's licensing proceedings for the Don Pedro and La Grange hydroelectric projects. It is currently unclear when the license amendment process is expected to be completed. This process and the other regulatory and/or adjudicatory proceedings would likely face legal challenges and have lengthy timelines, and quite possibly could result in a different assignment of flow responsibility (and therefore a different water supply impact on the SFPUC).

Third, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a "Delta watershed-wide agreement, including potential flow measures for the Tuolumne River" by March 1, 2019, and to

incorporate such agreements as an "alternative" for a future amendment to the Bay-Delta Plan to be presented to the SWRCB "as early as possible after December 1, 2019." In accordance with the SWRCB's instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB ("March 1st Proposed Voluntary Agreement"). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support the SFPUC's participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration. 13,14

The City's 2020 UWMP further summarized the current sources of uncertainty regarding RWS dry year water supply projections. This discussion is excerpted (with minor refinements) below:

- Benefits of the AWSP are not accounted for in current supply projections. As discussed above, SFPUC is exploring options to increase its supplies through the AWSP. Implementation of feasible projects developed under the AWSP is not yet reflected in the supply reliability scenarios presented herein and is anticipated to reduce the projected RWS supply shortfalls.
- Methodology for Tier One and Tier Two Wholesale drought allocations have not been established for wholesale shortages greater than 20%. As discussed further in Section 6.1.1.4 of this WSA, the current Tier One and Tier Two Plans are not designed for RWS supply shortages of greater than 20%. For UWMP planning purposes per BAWSCA guidance, the Tier One Wholesale share for a 16% to 20% supply reduction (62.5%) has been applied for reductions greater than 20% and an equal percent reduction has been applied across all Wholesale Customers. BAWSCA member agencies have not formally agreed to adopt this shortage allocation methodology and are in discussions about jointly developing an alternative allocation method that would consider additional equity factors if SFPUC is unable to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.
- <u>RWS demands are subject to change.</u> The RWS supply availability is dependent upon the system demands. The supply scenarios are based on the total projected Wholesale Customer purchases provided by BAWSCA to SFPUC in January 2021. Many BAWSCA agencies have refined their projected demands during the UWMP process after these estimates were provided to SFPUC. Furthermore, the RWS demand projections are subject to change in the future based upon future housing needs, increased conservation, and development of additional local supplies.

¹³ California Natural Resources Agency, "Voluntary Agreements to Improve Habitat and Flow in the Delta and its Watersheds," available at https://files.resources.ca.gov/voluntary-agreements/.

¹⁴ As of 29 October 2021, state regulators announced that the Voluntary Agreement negotiations process has ceased, with no agreement reached. San Francisco Chronicle, "California Drought: Key Talks Over Water Use Break Down, SF May Face Tighter Regulation," available at https://www.sfchronicle.com/sf/article/California-drought-Key-talks-over-water-use-16576132.php

• Frequency and duration of cutbacks are also uncertain. While the projected shortfalls presented in the UWMP appear severe with implementation of the Bay-Delta Plan Amendment, the actual frequency and duration of such shortfalls are uncertain. Based on the Hetch Hetchy and Local Simulation Model (HHLSM) simulations provided by BAWSCA for the Bay-Delta Plan Amendment scenario, rationing is anticipated to be required 20% of years for base year 2025 through 2035, 23% of all years for base year 2040, and 25% of years for base year 2045. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls.

The City's 2020 UWMP also notes that the implementation of the Bay-Delta Plan Amendment was under negotiation, through Voluntary Settlement Agreement negotiations between SFPUC, in partnership with other key stakeholders, and SWRCB. However, in October 2021, state regulators announced that these negotiations have ceased¹⁴. In March 2022, state regulators entered into a Memorandum of Understanding with twelve entities, advancing the process of reaching voluntary settlement agreement¹⁵. It is noted that SFPUC was not among the signatories of this Memorandum of Understanding and has not reached an agreement with state regulators. In August 2022, California State Senator John Becker and Assembly member Kevin Mullin delivered a joint letter with an information binder to Governor Newsom expressing their support for a Voluntary Agreement.

Further, implementation of the Bay-Delta Plan Amendment is still pending. The SWRCB has yet to approve an implementation policy for water supply cutbacks associated with the Bay-Delta Plan Amendment, particularly during droughts. Further, there are currently over a dozen active lawsuits challenging the SWRCB's adoption of the Bay-Delta Plan Amendment. This litigation is in the early stages and there have been no dispositive court rulings as of this date. This is a dynamic situation and the projected drought cutback allocations may need to be revised before the next (i.e., 2025) UWMP depending on court decisions and/or an adopted implementation policy.

Evidently, numerous uncertainties remain surrounding the implementation of the Bay-Delta Plan Amendment. Additional information regarding water service reliability and drought risks can be found in Chapter 7 of the City's 2020 UWMP.

6.1.1.3 Efforts to Increase RWS Supply Reliability

On June 2, 2021, the SFPUC released a memorandum which outlines numerous options the SFPUC is pursuing to improve the supply reliability projected in its 2020 UWMP and meet its Level of Service (LOS) Goals. This memorandum is included as **Appendix B**. Furthermore, the SFPUC's Water Supply Improvement Program (WSIP) and its Water Management Action Plan (Water MAP) articulate the SFPUC's goals and objectives to improve the delivery reliability of the RWS, including water supply reliability.

¹⁵ Memorandum of Understanding Advancing a Term Sheet for the Voluntary Agreements to Update and Implement the Bay-Delta Water Quality Control Plan, and Other Related Actions, dated 29 March 2022: https://resources.ca.gov/-/media/CNRA-Website/Files/NewsRoom/Voluntary-Agreement-Package-March-29-2022.pdf. It is noted that SFPUC is not a party to this Memorandum of Understanding.

The WSIP program goal is to improve the SFPUC's ability to reliably meet its Retail and Wholesale Customers water needs in non-drought and drought periods. In 2008, the SFPUC adopted LOS Goals and Objectives in conjunction with the adoption of the WSIP. The SFPUC's LOS Goals and Objectives include: (a) meeting average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years for system demands through 2028; (b) meeting dry-year delivery needs through 2028 while limiting rationing to a maximum 20% system-wide reduction in water service during extended droughts; (c) diversifying water supply options during non-drought and drought periods; and (d) improving use of new water sources and drought management, including groundwater, recycled water, conservation, and transfers (SFPUC, 2018). The anticipated completion date of the overall WSIP is May 2023. As of 31 December 2021, WSIP local projects are 100% complete and regional projects are 98.9% complete (SFPUC, 2022).

The SFPUC also developed a Water MAP in 2016 to provide the information necessary to begin developing a water supply program for the 2019 to 2040 planning horizon. The SFPUC intends that the Water MAP will guide its efforts to continue to meet its commitments and responsibilities to its customers, including the BAWSCA member agencies (BAWSCA, 2017). The Water MAP was developed with consideration of the 2018 SFPUC's supply decisions (now postponed to 2028; as discussed above), as well as recent changes to instream flow requirements and customer demand projections. The Water MAP has identified water supply needs on the RWS by 2040 and prioritized those needs in the following order:

- 1. Meeting existing obligations to existing permanent customers (3.5 MGD).
- 2. New supply in order to make the City of San Jose a permanent customer of the SFPUC (Up to 9.5 MGD).
- 3. New supply in order to make the City of Santa Clara a permanent customer of the SFPUC (Up to 5.0 MGD).
- 4. New supply to meet the City of East Palo Alto's projected needs above its ISG (Up to 1.5 MGD).

Through implementation of its Long-Term Water Supply Reliability Strategy (LTWRS), BAWCSA is also actively evaluating opportunities to increase the supply reliability of the RWS (BAWSCA, 2015). The strategy includes short- and long-term implementation plans including water supply management projects that could be implemented to meet identified needs. Potential projects include recycled water projects, desalination projects, water transfer projects, and local capture and reuse projects.

6.1.1.4 RWS Water Shortage Allocations

The Agreement includes a Water Shortage Allocation Plan (WSAP) that allocates water from the RWS to Retail and Wholesale Customers during system-wide shortages of 20% or less. As described in detail in the City's 2020 UWMP, the WSAP has two components:

1. The Tier One Plan, which allocates water between San Francisco and the Wholesale Customers collectively; and

2. The Tier Two Plan, which allocates the collective wholesale customer share among the Wholesale Customers.

We note that the dry year supply reliability projections provided herein under the Scenario 1 (Section 6.2) are obtained from the City's 2020 UWMP based on application of BAWSCA-provided revised methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20%. However, BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20%. The City is working independently and with the other BAWSCA agencies to identify regional measures to improve reliability for regional and local water supplies and meet its customers' water needs.

6.1.2 Groundwater Supply

Historically, the City has not utilized groundwater as a drinking source and does not expect to utilize groundwater as a regular potable or non-potable water source in the future. More information regarding the City's historical groundwater usage and underlying groundwater basin is provided in Section 6.2 of the City's 2020 UWMP (City of Burlingame, 2021).

6.2 Total Potable Supply in Normal, Single Dry, and Multiple Dry Years

The projected potable water supply source to the City, as described above, is surface water purchased from the RWS. Given the numerous uncertainties surrounding the implementation of the Bay-Delta Plan Amendment discussed above, this WSA analyzes water supply reliability through 2045 under three scenarios:

- Scenario 1. Implementation of the Bay-Delta Plan Amendment as presented in the City's 2020 UWMP. This scenario likely represents a worst-case scenario in which the Bay-Delta Plan Amendment is implemented as written and does not account for implementation of SFPUC's AWSP.
- 2. **Scenario 2**. No implementation of the Bay-Delta Plan Amendment based on information provided by SFPUC and BAWSCA included in Appendix F of the City's 2020 UWMP.
- 3. **Scenario 3**. Implementation of the Voluntary Agreement based on the assumption that demand will not be curtailed beyond the SFPUC LOS goal to not exceed 20% system-wide rationing as result of implementation of the Voluntary Agreement under negotiation.

A discussion of each scenario, along with the projected supplies and demands for the City under normal, single dry, and multiple dry year conditions, is presented below.

6.2.1 Scenario 1: Implementation of the Bay-Delta Plan

As discussed above, this scenario likely represents a worst-case scenario where the Bay-Delta Plan is implemented as written. BAWSCA provided a revised methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20% in support of 2020 UWMP development. However,

BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20%.

As shown in **Table 6a**, during normal hydrologic years, the City is expected to meet all projected demands, which are estimated to be 1,697 MG by 2045. During single dry years, the annual supply within the City's service area under this scenario will be reduced to 929 MG by 2045. Supply shortfalls relative to total demands during single dry years are estimated to range between 34% in 2025 and 45% in 2045.

During multiple dry years, the City's 2020 UWMP estimates that annual supply within the City's service area will be reduced to 981 MG in 2025 during the first year of a drought, and 843 MG in 2025 in the second, third, fourth, and fifth years of drought. The City's 2020 UWMP further estimates that in 2045, annual supply will be reduced to 929 MG during the first three years of a drought, and 792 MG in fourth and fifth years of drought. Supply shortfalls relative to total demands are estimated to range between 34% during the first year of a drought in 2025 to 53% during the fifth year of a drought in 2045 (see **Table 6b**).

If the "worst-case" supply scenario described under Section 6.1.1.2 in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for the implementation of actions identified as part of SFPUC's AWSP, BAWSCA's Long-Term Water Supply Reliability Strategy, shortfalls of up to 53% are projected during drought years. To address this issue, the City plans to enact its WSCP, which includes Mandatory Staged Restrictions of Water Use. The WSCP systematically identifies ways in which the City can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages and address water demand reductions over 50%. For example, if supply shortfalls amount to 53% or 905 MG per year ("worst-case" scenario under Scenario 1), then the City would implement Shortage Level 6 of the WSCP for shortages over 50% (see Section 8 and Appendix I of the City's 2020 UWMP) in order to ensure demand is met. The City's WSCP was revised as part of the City's 2020 UWMP update process and includes detailed information about how drought risks are evaluated by the City on an annual basis to determine the potential need for reductions. The City may choose to implement tiered allocation rationing to achieve the required level of water use reductions, as described further in Section 7.

6.2.2 Scenario 2: Without Implementation of the Bay-Delta Plan Amendment

This scenario represents the supply outlook for the City without implementation of the Bay-Delta Plan Amendment. Under this scenario, all BAWSCA member agencies would be allocated 100% of their contractual supply volume during single and multiple dry years up through the third year of a multi-year drought in 2045, at which point the members would be subject to their Tier Two drought cutbacks.

As shown in **Table 7a**, during normal hydrologic years and single dry years, the City is expected to meet all projected demands, which are estimated to be 1,697 MG by 2045. During multiple dry years, the City is expected to have sufficient supply to meet projected demands through the

third year of a multi-year drought in 2045 (see **Table 7b**). During the fourth and fifth years of a multi-year drought in 2045, supplies would be reduced to 1,455 MG, resulting in supply shortfalls of 14%. These shortfalls would be addressed through implementation of the City's WSCP.

6.2.3 Scenario 3: Implementation of the Voluntary Agreement

The March 1, 2019 Proposed Voluntary Agreement has yet to be accepted by SWRCB as an alternative to the Bay-Delta Plan Amendment and thus the shortages that would occur with its implementation are not known with certainty. However, given that the objectives of the Voluntary Agreement are to provide fishery improvements while protecting water supply through flow and non-flow measures, the RWS supply shortfalls under the Voluntary Agreement would be less than those projected under the Bay-Delta Plan Amendment, and therefore would require water use reductions of a lesser degree than that which would occur under Scenario 1.

It is anticipated that under this scenario, the City has sufficient water to meet all projected demands, including those of the proposed Project, in normal years. It is expected that the degree of water use reduction during dry years would also more closely align with the SFPUC's RWS LOS goal of limiting water use reduction to no more than 20% on a system-wide basis in drought years. The City will enact its WSCP to curtail demands and ensure that its supplies remain sufficient to serve all users, including the proposed Project.

7 COMPARISON OF SUPPLY AND DEMAND

Pursuant to CWC §10910c(3), this WSA must include an estimate of the projected water supplies available to the City under normal, single dry, and multiple dry years, and a discussion of whether those supplies will meet the projected demand associated with the proposed Project, in addition to the water system's existing and planned future uses. This assessment is parallel to the multiple-dry year supply reliability analysis required for UWMPs under CWC §10635. In 2018, CWC §10635 was revised to require UWMPs to extend this analysis to consider "a drought lasting five consecutive water years." Although CWC §10910c(3) has not yet been updated to require this for WSAs, a five-year drought scenario is also evaluated herein. However, as discussed in Section 5.1, the proposed Project is not expected to result in a net increase in water demands to the City relative to those projected in the City's 2020 UWMP water demand projections and the City's 2022 water demand projections update.

7.1 Supply and Demand during Normal and Single Dry Years (All Scenarios)

It is projected that available water supplies will be sufficient to meet the demands under normal and single dry year hydrologic conditions through 2045, inclusive of the proposed Project under all scenarios (see **Tables 6a** and **7a**).

7.2 Supply and Demand during Multiple Dry Years

 Under Scenario 1, shortfalls of up to 53% are possible in drought periods representing, as discussed above, the "worst-case" supply scenario is realized in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for implementation of SFPUC's AWSP. As discussed in Section 6.1.1.4, the City is working independently and with the other BAWSCA agencies to identify regional mitigation measures to improve reliability for regional and local water supplies and meet its customers' water needs. Thus, multiple dry year shortfalls would be expected to be lower than those shown in **Table 6b**.

- 2. Under Scenario 2, in which the Bay-Delta Plan Amendment is not implemented, the City will have sufficient supply to meet the demands in all year types through 2040, and would only anticipate a supply shortfall of 14% during the 4th and 5th year of a multi-year drought by 2045 as shown in **Table 7b**.
- 3. Under Scenario 3, it is anticipated that the degree of water use reduction during dry years would also more closely align with the SFPUC's RWS LOS goal of limiting water use reduction to no more than 20% on a system-wide basis in drought years. However, because negotiations of a Settlement Agreement are not complete, no values are available to explicitly model Scenario 3.

7.3 Rationing Implications to the Proposed Projects

As described in Section 6, in response to anticipated future dry-year shortfalls, the City has developed a WSCP that systematically identifies ways in which the City can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages ranging from up to 10% to greater than 50% shortfalls.

While the levels of water use reduction apply to the entire City service area (i.e., up to 53% under Scenario 1 an up to 14% under Scenario 2), the City may allocate different levels of rationing to individual customers based on customer type (e.g., dedicated irrigation, single family residential, multifamily residential, commercial, etc.) to achieve the level of citywide rationing required to ensure demand is met. It is anticipated that the WSCP would include a tiered allocation approach that imposes lower levels of rationing on customers who use less water than similar customers in the same customer class and would require higher levels of rationing by customers who use more water. City staff expects that under a future WSCP adopted by the City Council, the allocation method or combination of methods that would be applied during water shortages caused by drought would similarly be subject to the discretion of the Public Works Director.

The City anticipates that, as a "worst-case" scenario under Scenario 1, the proposed Project could be subject up to 53% rationing during a severe drought. In accordance with the WSCP, the level of rationing that would be imposed on the proposed Project would be determined at the time of a drought or other water shortage condition, and cannot be established with certainty prior to the shortage event. However, newly-constructed buildings, such as the proposed Project, have water-efficient fixtures that comply with the latest regulations. If these buildings can demonstrate below-average water use, they could be conceivably subjected to a lower level of rationing than other customers that meet or exceed the average water use for the same customer class, which will be determined at the time of shortage event.

7.4 2021-22 Drought Emergency

On May 24, 2022, the State Water Resources Control Board adopted an emergency water conservation regulation to ensure more aggressive conservation by local water agencies which went into effect on June 10. The regulation also requires all urban water suppliers to move to Level 2 of their WSCPs.

Previously, on July 12, 2021, the SFPUC called for voluntary 15% rationing for all wholesale and retail customers in alignment with the Governor Executive Order N-10-21. The RWS has historically met demand in its service area in all year types, and prior to 2021, only called for voluntary 10% rationing during 2007 to 2009 and 2014 to 2015. While RWS reliability is constrained by hydrology, physical facilities, institutional parameters including state and federal regulations, the SFPUC is implementing both capital improvement and planning processes to identify potential new water supplies and demand management actions to enhance RWS reliability and meet its contractual commitment to Wholesale Customers through 2045. Within and outside the RWS, BAWSCA is also leading multiple efforts to develop additional water supply for its member agencies through implementation of its Long-Term Water Supply Reliability Strategy.

8 CONCLUSIONS

As listed in Water Code §10910I(4), the primary purpose of this WSA is to evaluate whether sufficient water supply is available to meet all future water demands within the water supplier's service area, including those associated with the proposed Project, during normal and dry hydrologic years for a 20-year time horizon.

This WSA concludes that, because the proposed Project was included in the City's 2020 UWMP water demand projections and the City's 2022 water demand projections update, it will not affect water supply reliability within the City beyond what has been projected. Based on currently available information, the City expects to be able to meet all future demands within its service area inclusive of the proposed Project in normal hydrologic years and dry years. The shortfalls that are currently projected during dry years will be addressed through planned implementation of the City's WSCP⁴. In addition, as described herein and in the City's 2020 UWMP, the City, BAWSCA, and SFPUC are pursuing the development of additional water supplies and mitigation measures to improve the RWS and local supply reliability.

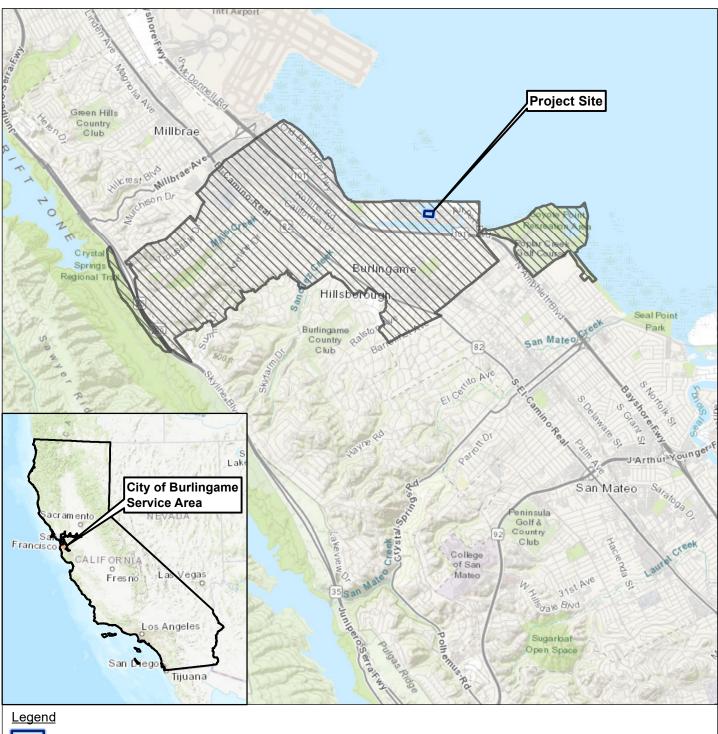
Approval of this WSA by the Burlingame City Council is not equivalent to approval of the development project for which the WSA is prepared. A WSA is an informational document required to be prepared for use in the City's environmental review of a project under the CEQA. Furthermore, this WSA does not verify the adequacy of existing distribution system capacity to serve the proposed Project.

9 REFERENCES

- Association of Bay Area Governments (ABAG), 2022. Final Regional Housing Needs Allocation (RHNA) Plan: San Francisco Bay Area, 2023-2031, adopted December 2021, updated March 2022.
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- City of Los Angeles Bureau of Engineering, 2012. City of Los Angeles Bureau of Engineering, City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, dated 6 April 2012.
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- San Francisco Public Utilities Commission (SFPUC), 2018. Amended and Restated Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo and Santa Clara County, prepared by SFPUC, dated November 2018.
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- Vassar Properties, 2022. Information provided by Vassar Properties, received 30 June 2022.



Project Boundary

City of Burlingame Service Area

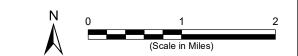
<u>Notes</u>

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1. All locations are approximate.

<u>Sources</u>

1. Basemap is ESRI's ArcGIS Online world aerial map, obtained 15 November 2022.

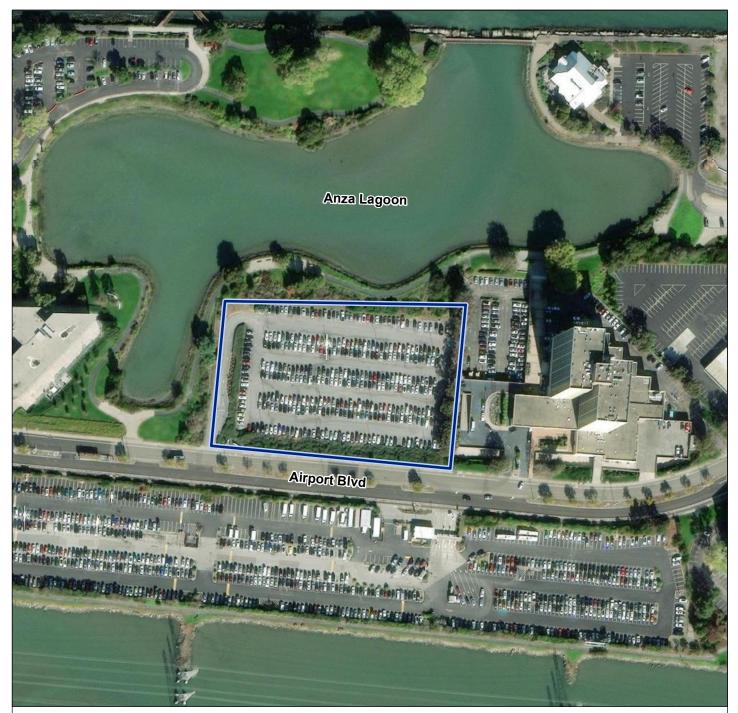


City of Burlingame Service Area and Project Location

environment & water

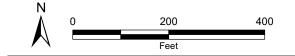
620 Airport Boulevard Burlingame, CA November 2022 EKI C20114.00

Figure 1



<u>Legend</u>





Project Location

<u>Notes</u>

1. All locations are approximate.

Sources

1. Basemap is ESRI's ArcGIS Online world aerial map, obtained 15 November 2022.



620 Airport Boulevard Burlingame, CA November 2022 EKI C20114.00

Figure 2

Table 1 Summary of Estimated Incremental Annual Project Water Demand

620 Airport Boulevard, Burlingame, California

| | Area | Demand Factor | Demand Factor | | Total Wa | l Water Demand (MGY) | | | | |
|--------------------------|-------------|---------------|---------------------|------|----------|----------------------|-------|-------|--|--|
| Water Use | (sq ft) (a) | (b) | Units | 2025 | 2030 | 2035 | 2040 | 2045 | | |
| Office Space | 193,352 | 0.055 | gpd/sq ft | 0 | 3.9 | 3.9 | 3.9 | 3.9 | | |
| R&D | 290,028 | 0.180 | gpd/sq ft | 0 | 19 | 19 | 19 | 19 | | |
| Irrigation (c) | 62,532 | | | 0 | 0.75 | 0.75 | 0.75 | 0.75 | | |
| Parking Garage (d) | 309,630 | 0.020 | gal/sq ft/cleaning | 0 | 0.07 | 0.07 | 0.07 | 0.07 | | |
| Existing Site Demand (e) | | | | 0 | -0.22 | -0.22 | -0.22 | -0.22 | | |
| | | Net Annu | al Water Demand (f) | 0 | 24 | 24 | 24 | 24 | | |

Abbreviations:

"DWR" = California Department of Water Resources

"gal" = gallon

"gpd/sq ft" = gallons per day per square foot

"City" = City of Burlingame

"MGY" = million gallons per year

"MWELO" = Model Water Efficient Landscape Ordinance

"R&D" = reasearch and development

"sq ft" = square feet

"WSA" = Water Supply Assessment

Notes:

- (a) Estimated square footage for the office space, R&D, irrigation, and parking garage uses per Reference 1.
- (b) Estimated demands for the office space and R&D per Reference 2. The R&D demand factor was calculated by dividing the total water use of the Genentech campus, and R&D land use with similar water usage, in 2016 by the total area of the campus to estimate demand per area.
- (c) Irrigation demands are calculated using the Maximum Allowable Water Allowance, per Reference 3.
- (d) Water use associated with this space is anticipated to be minimal, limited to cleaning of the facility. For purposes of this WSA, it is assumed that the garage will be cleaned twelve times per year and that 0.02 gal/sq ft will be used per each cleaning event, per Reference 4.
- (e) Existing site demands averaged over the years 2017-2021 per Reference 5. Existing demands are subtracted from total projected water demands to show the incremental increase in demands associated with the Project (i.e., the net increase in water demand).
- (f) Total may not sum due to rounding.

- 1. Vassar Properties, 2022. Information provided by Vassar Properties, recieved on 30 June 2022.
- 2. Genentech Campus Master Plan Update Draft Environmental Impact Report, Prepared by Lamphier-Gregory, dated October 2019.
- 3. California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance, 29 September 2020.
- 4. City of Los Angeles Bureau of Engineering, 2012. City of Los Angeles Bureau of Engineering, City of Los Angeles Bureau of Sanitation, Sewer Generation Rates Table, dated 6 April 2012.
- $5. \quad \text{City of Burlingame, 2022. Information provided by the City of Burlingame, received on 23 June~2022.}\\$

Table 2 Estimated Landscaping Water Use

620 Airport Boulevard, Burlingame, California

| andscaping Land Us | Area of Land Use (ac) (a) | [B] Annual Reference Evapotranspiration Rate (in) (b) | [C] Evapotranspiration Adjustment Factor (ETAF) (c) | [D] Maximum Applied Water Allowance (MAWA) (MGY) D = A * B * C (d) | Estimated Water Use (MGY) |
|------------------------------------|------------------------------------|---|---|--|---------------------------------|
| Non-Residential Landscaped Area | 1.44 | 42.8 | 0.45 | 0.75 | 0.75 |

Abbreviations:

"ETAF" = Evapotranspiration Adjustment Factor

Notes:

- (a) Total landscaped area per Reference 1.
- (b) Annual reference evapotranspiration rate for the Redwood City region per Reference 2.
- (c) The ETAF is 0.45 for non-residential areas.
- (d) The MAWA calculations are described in Reference 3.

- 1. Vassar Properties, 2022. Information provided by Vassar Properties, recieved on 30 June 2022.
- 2. California Department of Water Resources, 2012. California Irrigation Management Information System Reference Evapotranspiration Zones, January 2012.
- 3. California Code of Regulations, Title 23, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance, 29 September 2020.

[&]quot;ac" = acre

[&]quot;in" = inches

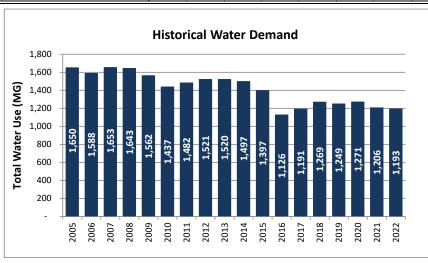
[&]quot;MAWA" = Maximum Applied Water Allowance

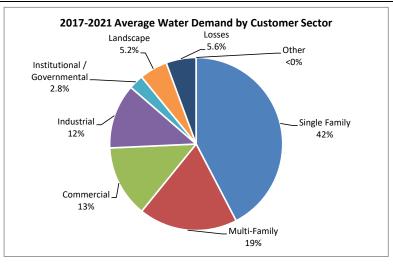
[&]quot;MGY" = million gallons per year

Table 3
Historical Water Demand for the City of Burlingame

620 Airport Boulevard, Burlingame, California

| Category | | | | | | C | ity of Bu | ırlingam | e Annual | Water D | emand | (MGY) (a |) | | | | | |
|--------------------------|-------|-------|-------|-------|-------|-------|-----------|----------|----------|---------|-------|----------|-------|-------|-------|-------|-------|-------|
| category | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Potable Water Demand (b) | 1,650 | 1,588 | 1,653 | 1,643 | 1,562 | 1,437 | 1,482 | 1,521 | 1,520 | 1,497 | 1,397 | 1,126 | 1,191 | 1,269 | 1,249 | 1,271 | 1,206 | 1,193 |
| Total Water Demand | 1,650 | 1,588 | 1,653 | 1,643 | 1,562 | 1,437 | 1,482 | 1,521 | 1,520 | 1,497 | 1,397 | 1,126 | 1,191 | 1,269 | 1,249 | 1,271 | 1,206 | 1,193 |





Abbreviations:

"FY" = Fiscal Year

"MGY" = million gallons per year

"SWRCB" = State Water Resources Control Board

"UWMP" = Urban Water Management Plan

Notes:

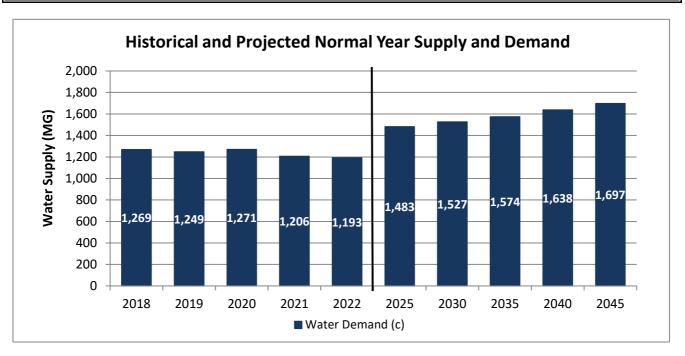
- (a) Historical water demands from 2005-2009 per Table 3-1 in Reference 1, 2010-2020 per Table 4-1 in Reference 2, 2021 per Reference 3, and 2022 per Reference 4.
- (b) All data is presented on a FY basis.

- 1. 2015 Urban Water Management Plan, City of Burlingame, prepared by EKI Environment & Water, Inc., dated June 2016.
- 2. 2020 Urban Water Management Plan, City of Burlingame, prepared by EKI Environment & Water, Inc., dated September 2021.
- 3. SWRCB Water Conservation and Production Reports, Urban Water Supplier Monthly Reports, dated 8 July 2022.
- 4. City of Burlingame, 2022. Information provided by the City of Burlingame, received 26 July 2022.

Table 4 Historical and Projected Water Demand for the City of Burlingame

620 Airport Boulevard, Burlingame, California

| | | Historical | Demand | (MGY) (a) | | | Projected | Demand | (MGY) (b) | |
|------------------|-------|------------|--------|-----------|-------|-------|-----------|--------|-----------|-------|
| Water Demand | 2018 | 2019 | 2020 | 2021 | 2022 | 2025 | 2030 | 2035 | 2040 | 2045 |
| Water Demand (c) | 1,269 | 1,249 | 1,271 | 1,206 | 1,193 | 1,483 | 1,527 | 1,574 | 1,638 | 1,697 |



Abbreviations:

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"DSS Model" = Demand Management Decision Support System Model

"MGY" = million gallons per year

"SWRCB" = State Water Resources Control Board

Notes:

- (a) Historical water demand for years 2018-2020 per Table 4-1 in Reference 1, 2021 per Reference 2, and 2022 per Reference 3. Demands are presented on a FY basis.
- (b) Projected water demand per Reference 4.
- (c) The Proposed Project demands are included in the City's 2020 UWMP projections and the 2022 demand projections update and do not contribute to incremental demands.

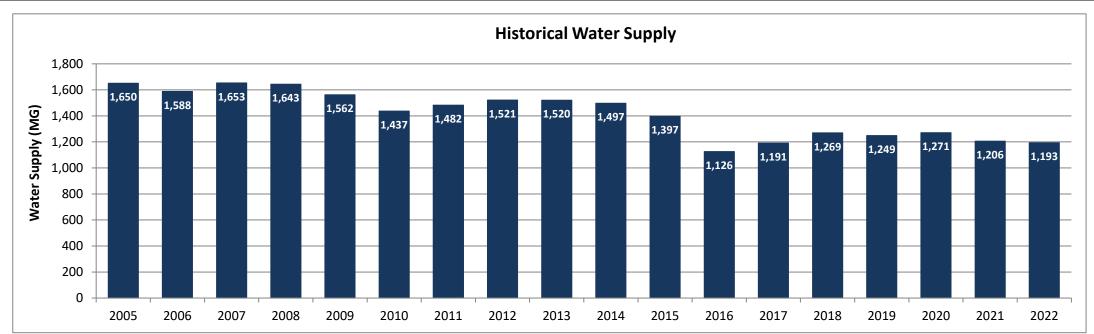
- 1. 2020 Urban Water Management Plan, City of Burlingame, prepared by EKI Environment & Water, Inc., dated September 2021.
- 2. SWRCB Water Conservation and Production Reports, Urban Water Supplier Monthly Reports, dated 8 July 2022.
- 3. City of Burlingame, 2022. Information provided by the City of Burlingame, received 26 July 2022.
- 4. City of Burlingame DSS Model, updated 9 August 2022.

[&]quot;FY" = Fiscal Year

Table 5 Historical Water Supply for the City of Burlingame

620 Airport Boulevard, Burlingame, California

| Water Supply Source | | | | | | | 1 | Historical | Water St | ıpply (Mo | 3Y) (a) (b) | | | | | | | |
|---------------------------------|-------|-------|-------|-------|-------|-------|-------|------------|----------|-----------|-------------|-------|-------|-------|-------|-------|-------|-------|
| water supply source | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
| Purchased or Imported Water (c) | 1,650 | 1,588 | 1,653 | 1,643 | 1,562 | 1,437 | 1,482 | 1,521 | 1,520 | 1,497 | 1,397 | 1,126 | 1,191 | 1,269 | 1,249 | 1,271 | 1,206 | 1,193 |
| Total Water Supply | 1,650 | 1,588 | 1,653 | 1,643 | 1,562 | 1,437 | 1,482 | 1,521 | 1,520 | 1,497 | 1,397 | 1,126 | 1,191 | 1,269 | 1,249 | 1,271 | 1,206 | 1,193 |



Abbreviations:

"City" = City of Burlingame "RWS" = Regional Water System

"FY" = Fiscal Year "SFPUC" = San Francisco Public Utilities Commission

"ISG" = Individual Supply Guarantee "SWRCB" = State Water Resources Control Board

"MGY" = million gallons per year "UWMP" = Urban Water Management Plan

Notes:

- (a) Historical water demands from 2005-2009 per Table 3-1 in Reference 1, 2010-2020 per Table 4-1 in Reference 2, 2021 per Reference 3, and 2022 per Reference 4.
- (b) All data is presented on a FY basis.
- (c) Water purchased from the SFPUC RWS. The City has an ISG of 5.23 MG per day, or approximately 1,909 MG per year.

- 1. 2015 Urban Water Management Plan, City of Burlingame, prepared by EKI Environment & Water, Inc., dated June 2016.
- 2. 2020 Urban Water Management Plan, City of Burlingame, prepared by EKI Environment & Water, Inc., dated September 2021.
- 3. SWRCB Water Conservation and Production Reports, Urban Water Supplier Monthly Reports, dated 8 July 2022.
- 4. City of Burlingame, 2022. Information provided by the City of Burlingame, received 26 July 2022.

Table 6a

Scenario 1: Projected Normal and Single Dry Year Water Supply and Demand for the City of Burlingame with Implementation of the Bay-Delta Plan Amendment

620 Airport Boulevard, Burlingame, California

| Weter County and Damend | Pı | rojected Norma | l Year Supply ar | nd Demand (MC | GY) |
|---|-------|----------------|-------------------|---------------|-------|
| Water Supply and Demand | 2025 | 2030 | 2035 | 2040 | 2045 |
| Normal Year Supply (a) | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 |
| Single Dry Year Supply with Implementation of BDP (b) | 981 | 1,005 | 1,035 | 1,051 | 929 |
| Demand | | | | | |
| City of Burlingame (c) | 1,483 | 1,527 | 1,574 | 1,638 | 1,697 |
| Proposed Project (d) | | Included in | City of Burlingar | ne Demands | |
| Water Demand Inclusive of Proposed Project | 1,483 | 1,527 | 1,574 | 1,638 | 1,697 |
| Normal Year Supply Shortfall (% demand) | None | None | None | None | None |
| Single Dry Year Supply Shortfall (% demand) | 34% | 34% | 34% | 36% | 45% |

Abbreviations:

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"BDP" = Bay-Delta Plan Amendment

"City" = City of Burlingame

"DSS Model" = Demand Management Decision Support

System Model

"ISG" = Individual Supply Guarantee

Notes:

- (a) Water supply available to the City during normal years is assumed to be equal to the City's ISG. The City has an ISG of 5.23 MGD, or approximately 1,909 MG per year.
- (b) Water supply available to the City during single dry years is based on dry year supply projections, assuming the BDP is implemented as written. Supply projections with the BDP are presented per the City's 2020 UWMP; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC. Supply volumes, which assumes implementation of the BPD, are per Reference 1.
- (c) Water demand projections for the City were updated in 2022 per Reference 2.
- (d) The Proposed Project demands are included in the City's 2020 UWMP projections and the 2022 demand projections update and do not contribute to incremental demands.

- 1. SFPUC Regional Water System Supply Reliability and BAWSCA Tier 2 Drought Implementation Scenarios, Updated Drought Allocations, dated 1 April 2021.
- 2. City of Burlingame DSS Model, updated 9 August 2022.

[&]quot;MGY" = million gallons per year

[&]quot;MGD" = million gallons per day

[&]quot;Proposed Project" = 777 Airport Boulevard

[&]quot;SFPUC" = San Francisco Public Utilities Commission

[&]quot;UWMP" = Urban Water Management Plan

Table 6b

Scenario 1: Multiple Dry Year Water Supply and Demand for the City with Implementation of the Bay-Delta Plan Amendment

620 Airport Boulevard, Burlingame, California

| | | | | | | | | | Project | ed Wate | r Supply | and Den | nand Du | ring Mul | iple Dry | Years (N | IGY) (a) | | | | | | | | |
|---|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|----------|------------|-----------|----------|----------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| Water Supply and Demand | | | 2025 | | | | | 2030 | | | | | 2035 | | | | | 2040 | | | | | 2045 | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Multiple Dry Year Supply with Implementation of BDP (b) | 981 | 843 | 843 | 843 | 843 | 1,005 | 864 | 864 | 864 | 864 | 1,035 | 873 | 873 | 873 | 809 | 1,051 | 901 | 901 | 801 | 801 | 929 | 929 | 929 | 792 | 792 |
| Demand | | | | | | | | | | | | | | | | | | | | | | | | | |
| City of Burlingame (c) | 1,483 | 1,483 | 1,483 | 1,483 | 1,483 | 1,527 | 1,527 | 1,527 | 1,527 | 1,527 | 1,574 | 1,574 | 1,574 | 1,574 | 1,574 | 1,638 | 1,638 | 1,638 | 1,638 | 1,638 | 1,697 | 1,697 | 1,697 | 1,697 | 1,697 |
| Proposed Project (d) | | | | - | | | | | | | Include | ed in City | of Burlir | ngame De | emands | | | | | | | | * | | |
| Water Demand Inclusive of Proposed Project | 1,483 | 1,483 | 1,483 | 1,483 | 1,483 | 1,527 | 1,527 | 1,527 | 1,527 | 1,527 | 1,574 | 1,574 | 1,574 | 1,574 | 1,574 | 1,638 | 1,638 | 1,638 | 1,638 | 1,638 | 1,697 | 1,697 | 1,697 | 1,697 | 1,697 |
| Supply Shortfall (% demand) | 34% | 43% | 43% | 43% | 43% | 34% | 43% | 43% | 43% | 43% | 34% | 45% | 45% | 45% | 49% | 36% | 45% | 45% | 51% | 51% | 45% | 45% | 45% | 53% | 53% |

Abbreviations:

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"BDP" = Bay-Delta Plan Amendment

"City" = City of Burlingame

"DSS Model" = Demand Management Decision Support System Model

"MGY" = million gallons per year

"Proposed Project" = 777 Airport Boulevard

"SFPUC" = San Francisco Public Utilities Commission

"UWMP" = Urban Water Management Plan

"WSA" = Water Supply Assessment

Notes:

- (a) While WSA regulations only require an analysis of a three-year drought scenario, UWMP regulations were updated in 2018 to include a five-year drought scenario (California Water Code §10635), Therefore, a five-year drought scenario is presented here.
- (b) Projected supply is based on dry year allocation projections if the BDP is adopted, based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC, per Reference 1.
- (c) Water demand projections for the City were updated in 2022 per Reference 2.
- (d) The Proposed Project demands are included in the City's 2020 UWMP projections and the 2022 demand projections update and do not contribute to incremental demands.

- 1. SFPUC Regional Water System Supply Reliability and BAWSCA Tier 2 Drought Implementation Scenarios, Updated Drought Allocations, dated 1 April 2021.
- 2. City of Burlingame DSS Model, updated 9 August 2022.

Table 7a

Scenario 2: Projected Normal and Single Dry Year Water Supply and Demand for the City of Burlingame without Implementation of the Bay-Delta Plan Amendment

620 Airport Boulevard, Burlingame, California

| W. C. J. 15 | P | rojected Norma | Year Supply ar | nd Demand (MC | GY) |
|--|-------|----------------|-------------------|---------------|-------|
| Water Supply and Demand | 2025 | 2030 | 2035 | 2040 | 2045 |
| Normal Year Supply (a) | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 |
| Single Dry Year Supply without Implementation of BDP (b) | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 |
| Demand | | | | | |
| City of Burlingame (c) | 1,483 | 1,527 | 1,574 | 1,638 | 1,697 |
| Proposed Project (d) | | Included in | City of Burlingar | me Demands | , |
| Water Demand Inclusive of Proposed Project | 1,483 | 1,527 | 1,574 | 1,638 | 1,697 |
| Normal Year Supply Shortfall (% demand) | None | None | None | None | None |
| Single Dry Year Supply Shortfall (% demand) | None | None | None | None | None |

Abbreviations:

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"BDP" = Bay-Delta Plan Amendment

"City" = City of Burlingame

"DSS Model" = Demand Management Decision Support

System Model

"ISG" = Individual Supply Guarantee

"MGY" = million gallons per year

"MGD" = million gallons per day

"Proposed Project" = 777 Airport Boulevard

"SFPUC" = San Francisco Public Utilities Commission

"UWMP" = Urban Water Management Plan

Notes:

- (a) Water supply available to the City during normal years is assumed to be equal to the City's ISG. The City has an ISG of 5.23 MGD, or approximately 1,909 MG per year.
- (b) Water supply available to the City during single dry years is based on dry year allocation projections if the BDP is not adopted, based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA per Table N in Reference 1.
- (c) Water demand projections for the City were updated in 2022 per Reference 2.
- (d) The Proposed Project demands are included in the City's 2020 UWMP projections and the 2022 demand projections update and do not contribute to incremental demands.

- 1. SFPUC Regional Water System Supply Reliability and BAWSCA Tier 2 Drought Implementation Scenarios, Updated Drought Allocations, dated 1 April 2021.
- 2. City of Burlingame DSS Model, updated 9 August 2022.

Table 7b

Scenario 2: Multiple Dry Year Water Supply and Demand for the City without Implementation of the Bay-Delta Plan Amendment

620 Airport Boulevard, Burlingame, California

| | | | | | | | | | Project | ed Wate | r Supply | and Den | nand Du | ring Mul | iple Dry | Years (M | IGY) (a) | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|----------|------------|-----------|----------|----------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| Water Supply and Demand | | | 2025 | | | | | 2030 | | | | | 2035 | | | | | 2040 | | | | | 2045 | | |
| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
| Multiple Dry Year Supply without Implementation of BDP (b) | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,909 | 1,455 | 1,455 |
| Demand | | | | | | | | | | | | | | | | | | | | | | | | | |
| City of Burlingame (c) | 1,483 | 1,483 | 1,483 | 1,483 | 1,483 | 1,527 | 1,527 | 1,527 | 1,527 | 1,527 | 1,574 | 1,574 | 1,574 | 1,574 | 1,574 | 1,638 | 1,638 | 1,638 | 1,638 | 1,638 | 1,697 | 1,697 | 1,697 | 1,697 | 1,697 |
| Proposed Project (d) | | | | | | • | | | I | | Include | ed in City | of Burlir | ngame De | emands | | | | I | | | 1 | 1 | | |
| Water Demand Inclusive of Proposed Project | 1,483 | 1,483 | 1,483 | 1,483 | 1,483 | 1,527 | 1,527 | 1,527 | 1,527 | 1,527 | 1,574 | 1,574 | 1,574 | 1,574 | 1,574 | 1,638 | 1,638 | 1,638 | 1,638 | 1,638 | 1,697 | 1,697 | 1,697 | 1,697 | 1,697 |
| Supply Shortfall (% demand) | None | None | None | None | None | None | None | None | None | None | None | None | None | None | None | 14% | 14% |

Abbreviations:

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"BDP" = Bay-Delta Plan Amendment

"City" = City of Burlingame

"DSS Model" = Demand Management Decision Support System Model

"MGY" = million gallons per year

"Proposed Project" = 777 Airport Boulevard

"SFPUC" = San Francisco Public Utilities Commission

"UWMP" = Urban Water Management Plan

"WSA" = Water Supply Assessment

Notes:

- (a) While WSA regulations only require an analysis of a three-year drought scenario, UWMP regulations were updated in 2018 to include a five-year drought scenario (California Water Code §10635), Therefore, a five-year drought scenario is presented here.
- (b) Projected supply is based on dry year allocation projections if the BDP is not adopted, based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA per Table N in Reference 1. Supply allocations in the fourth- and fifth- year drought in 2045 represent the City's Tier Two drought cutbacks.
- (c) Water demand projections for the City were updated in 2022 per Reference 2.
- (d) The Proposed Project demands are included in the City's 2020 UWMP projections and the 2022 demand projections update and do not contribute to incremental demands.

- 1. SFPUC Regional Water System Supply Reliability and BAWSCA Tier 2 Drought Implementation Scenarios, Updated Drought Allocations, dated 1 April 2021.
- 2. City of Burlingame DSS Model, updated 9 August 2022.



Appendix A

Landscape Coverage Plans



Appendix B

SFPUC Memorandum Re: Regional Water System Supply Reliability and UWMP 2020



F 415.554.3161



TO:

SFPUC Wholesale Customers

FROM:

Steven R. Ritchie, Assistant General Manager, Water

DATE:

June 2, 2021

RE:

Regional Water System Supply Reliability and UWMP 2020

This memo is in response to various comments from Wholesale Customers we have received regarding the reliability of the Regional Water System supply and San Francisco's 2020 Urban Water Management Plan (UWMP).

As you are all aware, the UWMP makes clear the potential effect of the amendments to the Bay-Delta Water Quality Control Plan adopted by the State Water Resources Control Board on December 12, 2018 should it be implemented. Regional Water System-wide water supply shortages of 40-50% could occur until alternative water supplies are developed to replace those shortfalls. Those shortages could increase dramatically if the State Water Board's proposed Water Quality Certification of the Don Pedro Federal Energy Regulatory Commission (FERC) relicensing were implemented.

We are pursuing several courses of action to remedy this situation as detailed below.

Pursuing a Tuolumne River Voluntary Agreement

The State Water Board included in its action of December 12, 2018 a provision allowing for the development of Voluntary Agreements as an alternative to the adopted Plan. Together with the Modesto and Turlock Irrigation Districts, we have been actively pursuing a Tuolumne River Voluntary Agreement (TRVA) since January 2017. We believe the TRVA is a superior approach to producing benefits for fish with a much more modest effect on our water supply. Unfortunately, it has been a challenge to work with the State on this, but we continue to persist, and of course we are still interested in early implementation of the TRVA.

Evaluating our Drought Planning Scenario in light of climate change

Ever since the drought of 1987-92, we have been using a Drought Planning Scenario with a duration of 8.5 years as a stress test of our Regional Water System supplies. Some stakeholders have criticized this methodology as being too conservative. This fall we anticipate our Commission convening a workshop

London N. Breed Mayor

Sophie Maxwell President

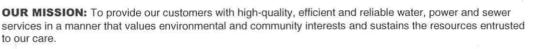
> Anson Moran Vice President

Tim Paulson Commissioner

Ed Harrington Commissioner

Newsha Ajami Commissioner

Michael Carlin Acting General Manager





regarding our use of the 8.5-year Drought Planning Scenario, particularly in light of climate change resilience assessment work that we have funded through the Water Research Foundation. We look forward to a valuable discussion with our various stakeholders and the Commission.

Pursuing Alternative Water Supplies

The SFPUC continues to aggressively pursue Alternative Water Supplies to address whatever shortfall may ultimately occur pending the outcome of negotiation and/or litigation. The most extreme degree of Regional Water System supply shortfall is modeled to be 93 million gallons per day under implementation of the Bay-Delta Plan amendments. We are actively pursuing more than a dozen projects, including recycled water for irrigation, purified water for potable use, increased reservoir storage and conveyance, brackish water desalination, and partnerships with other agencies, particularly the Turlock and Modesto Irrigation Districts. Our goal is to have a suite of alternative water supply projects ready for CEQA review by July 1, 2023.

In litigation with the State over the Bay-Delta Plan Amendments

On January 10, 2019, we joined in litigation against the State over the adoption of the Bay-Delta Water Quality Control Plan Amendments on substantive and procedural grounds. The lawsuit was necessary because there is a statute of limitations on CEQA cases of 30 days, and we needed to preserve our legal options in the event that we are unsuccessful in reaching a voluntary agreement for the Tuolumne River. Even then, potential settlement of this litigation is a possibility in the future.

In litigation with the State over the proposed Don Pedro FERC Water Quality Certification

The State Water Board staff raised the stakes on these matters by issuing a Water Quality Certification for the Don Pedro FERC relicensing on January 15, 2021 that goes well beyond the Bay-Delta Plan amendments. The potential impact of the conditions included in the Certification appear to virtually double the water supply impact on our Regional Water System of the Bay-Delta Plan amendments. We requested that the State Water Board reconsider the Certification, including conducting hearings on it, but the State Water Board took no action. As a result, we were left with no choice but to once again file suit against the State. Again, the Certification includes a clause that it could be replaced by a Voluntary Agreement, but that is far from a certainty.

I hope this makes it clear that we are actively pursuing all options to resolve this difficult situation. We remain committed to creating benefits for the Tuolumne River while meeting our Water Supply Level of Service Goals and Objectives for our retail and wholesale customers.

cc.: SFPUC Commissioners
Nicole Sandkulla, CEO/General Manager, BAWSCA



Appendix C

Request for Information, provided by Vassar Properties



| Project Address | Date Submitted |
|------------------------|---------------------------------|
| 620 Airport Boulevard | Click or tap to enter a date. |
| Project Contact's Name | Project Contact's Information |
| Matthew Henderson | (628)-786-0407 |
| | mhenderson@vassarproperties.com |

PROJECT DESCRIPTION

Instructions: Answer the following questions using the space provided or include a separate attachment. If including an attachment, ensure that it addresses all the following questions or provide written responses below.

Provide a detailed description of the proposed Project.

Click or tap here to enter text.

Total lot size of Project (square feet):

3.7 Acres

Total building area (square feet):

793,010

Provide all assessor's parcel numbers (APNs) associated with the Project.

026-342-330

☑ Attach a figure identifying the Project site plan that can be included in the WSA.

Provide all Project land uses. If the Project includes housing, please specify the type of anticipated housing units with as much detail as available. If additional rows are needed, please provide as attachment.

| Land Use | Square Footage | Number of Housing Units |
|----------------------------------|----------------------------------|----------------------------------|
| Office | 483,380 | Click or tap here to enter text. |
| Parking | 309,630 | Click or tap here to enter text. |
| Green Roof | 27,060 | Click or tap here to enter text. |
| Landscaping | 35,508 | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |



WSA RFI Form v3 Page 1 of 5



| Does the Project include any of the following water using features (e.g., pools, fountains, constructed ponds, etc.)? | | |
|--|------------|---|
| ☐ Yes | | |
| If yes, describe: | | |
| Click or tap here to enter text. | | |
| Is the Project expected to include any manufacturing type uses? | ☐ Yes | ⊠ No |
| If yes, describe: | | |
| Click or tap here to enter text. | | |
| Is the Project expected to include any food service uses? | ☐ Yes | ⊠ No |
| If yes, describe: | | |
| Click or tap here to enter text. | | |
| Is the Project expected to include any cleaning service uses? | ☐ Yes | ⊠ No |
| If yes, describe: | | |
| Click or tap here to enter text. | | |
| Is the Project expected to include hotel uses? | ☐ Yes | ⊠ No |
| If yes, provide the number of rooms: | | |
| Click or tap here to enter text. | | |
| Does the Project include institutional housing (e.g., hospitals, nur | rsing home | es, rehabilitation centers, etc.)? Yes No |
| If yes, indicate how many beds: | | |
| Click or tap here to enter text. | | |
| Will the Project use non-domestic water (e.g., process water, plu | mbed disti | illed water, etc.)? □ Yes ☒ No |
| If yes, describe: | | |
| Click or tap here to enter text. | | |
| Provide the expected number of employees, if applicable. If Project includes multiple land uses, indicate the number of employees for each land use. If an increase is anticipated for "peak seasons," provide the number of employees and anticipated duration of the peak season(s). 1,100 for office use. 0 for all others | | |
| | | |
| Provide the expected number of residents, if applicable. If Project includes multiple housing types, indicate the number of residents anticipated per housing type. | | |
| 0 | | |



Provide the anticipated buildout schedule for the Project, including anticipated date of completion and any anticipated partial occupancy milestones.

Project anticipated approval in Spring 2023. With project start assumed in summer 2023 and estimated 2.5 year construction duration, completion would be at the end of 2026

WATER SUPPLY SOURCES

Identify any source(s) of water other than City potable water that will supply the Project (e.g., recycled water, on-site reuse, etc.).

Click or tap here to enter text.

| Water Source | Annual Volume Available | Annual Volume Anticipated to be Used by Project Uses |
|----------------------------------|----------------------------------|---|
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
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| PROJECT WATER DEMANDS | | |
|---|--|--|
| Have water demands been estimated for this Project? ☑ Yes □ No | | |
| If yes, provide estimated annual water demand. Include estimates for all land uses and supply sources. Include a description of the basis used for the estimates. | | |
| Click or tap here to enter text. | | |
| Attach the landscaping plan to this form, if available. | | |
| If the landscaping plan is included, ensure that it addresses all of the following items or provide a written response below: | | |
| Indicate the Project landscaping square footage, anticipated use (e.g., gathering space, playground, aesthetic, etc.), and water supply source. Indicate any areas associated with housing units (i.e., areas managed by the residents, not common space). Indicate if any areas meet the State Water Resources Control Board definition of non-functional turf (i.e., "turf that is solely ornamental and not regularly used for human recreational purposes or for civic or community events. Non-functional turf does not include sports fields and turf that is regularly used for human recreational purposes or for civic or community events."). | | |
| Click or tap here to enter text. | | |

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3. Site Square Footages

City of Burlingame Water Supply Assessment Request for Information Form

| Have water demands been estimated for the Project landscaping? Refer to Water Conservation in Landscape Ordinance (Chapter 18.17 of the Burlingame Municipal Code, Ordinance 1845-2010). \square Yes \square No | | | |
|---|--|--|--|
| If yes, provide the estimated total water use (ETWU) per the Water Conservation in Landscape Ordinance, and include calculations as an attachment. | | | |
| Click or tap here to enter text. | | | |
| If the Project includes residential uses, does the provided ETWU include water use associated with landscape areas controlled by residents? Yes No | | | |
| If yes, describe how landscape water use for areas controlled by residents was calculated. | | | |
| Click or tap here to enter text. | | | |
| | | | |
| ATTACHMENTS | | | |
| Provide list of attachments: | | | |
| 1. Water Use Calculations | | | |
| 2. Site Plan w/ Building Square Footages | | | |



CERTIFICATION

I certify that the information provided in this form is, to the best of my knowledge and belief, true, accurate, and complete. I further certify that the information provided in this form and any associated attachments will be used in preparation for a Water Supply Assessment for the Project listed above. I understand that changes to the information provided to the City of Burlingame may affect assumptions for calculating the water demands associated with this Project. If there are significant changes to the plan, I will contact the City of Burlingame immediately to provide updated information.

| Print Name: Matthew Henderson | Print Title: Development Coordinator |
|-------------------------------|---------------------------------------|
| Signature (type or scan): | Date: |
| Matthew Henderson | 06/30/2022 |

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