

# Housing Element Update Water Supply Assessment

PREPARED FOR

City of San Bruno



PREPARED BY



# Housing Element Update Water Supply Assessment

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Prepared for

## City of San Bruno

Project No. 462-60-22-41



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Project Manager: Amy W. Kwong, PE

11-22-22

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Date

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QA/QC Review: Elizabeth Drayer, PE

11-22-22

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Date

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## LIST OF ACRONYMS AND ABBREVIATIONS

ABAG	Association of Bay Area Governments
ADU	Accessory Dwelling Units
BAWSCA	Bay Area Water Supply and Conservation Agency
CCF	Hundred cubic feet
CEQA	California Environmental Quality Act
City	City of San Bruno
County	San Mateo County
gpd	Gallons per day
gpd/DU	Gallons per day per dwelling unit
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
GSR	Groundwater Storage and Recovery
GWMP	Groundwater Management Plan
IS/MND	Initial Study/Mitigated Negative Declaration
ISG	Individual Supply Guarantee
LOS	Level of Service
MGD	Million gallons per day
NCCWD	North Coast County Water District
NRW	Non-revenue water
RHNA	Regional Housing Needs Allocation
RWS	Regional Water System
SFPUC	San Francisco Public Utilities Commission
SGMA	Sustainable Groundwater Management Act
SWRCB	State Water Resources Control Board
TCP	Transit Corridors Plan
UWMP	Urban Water Management Plan
Water Code	California Water Code
WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WSIP	Water System Improvement Program
WSMP	Water System Master Plan



## EXECUTIVE SUMMARY

### Purpose of Water Supply Assessment

The purpose of this Water Supply Assessment (WSA) is to perform the evaluation required by California Water Code (Water Code) sections 10910 through 10915, as established by Senate Bill 610 (SB 610), in connection with the City of San Bruno's (City) Housing Element Update (Proposed Project).

This WSA evaluates the projected water demands associated with the Proposed Project and the availability of water supplies to meet those projected water demands under various hydrologic conditions (i.e., normal, single dry, and multiple dry years). This WSA is not intended to reserve water, or to function as a "will serve" letter or any other form of commitment to supply water (see Water Code Section 10914). The provision of water service will continue to be undertaken in a manner consistent with applicable City policies and procedures, consistent with existing law.

### Proposed Project Overview

The Regional Housing Needs Allocation (RHNA) Plan process identifies the total number of housing units, separated into four affordability levels, that every local government in the Bay Area must plan to accommodate for the period from 2023 to 2031. The primary role of the RHNA methodology is to encourage a pattern of housing growth for the Bay Area that meets the needs of all residents.

The City's RHNA is 3,165 housing units, which was determined by the Association of Bay Area Governments (ABAG) and a partnership between all 21 jurisdictions in San Mateo County (County) known as 21 Elements. As part of the RHNA process, the City is required to update the Housing Element of its General Plan to show how it plans to accommodate its RHNA housing units. To accommodate its RHNA, the City has identified several opportunity sites for future development. The Proposed Project includes these opportunity sites, Pipeline Projects (i.e., projects approved by the City's Planning Department), and Accessory Dwelling Units (ADUs).

The City's updated Housing Element includes 3,616 housing units, about 450 more than its RHNA. Of these 3,616 units, only 2,122 units are included in the Proposed Project evaluated in this WSA. The other 1,494 housing units were previously included in WSAs for the Transit Corridors Plan and the Bayhill Specific Plan. All 2,122 housing units included in the Proposed Project are assumed to come online by 2031.

### Projected Water Demands

The projected potable water demand for buildout of the Proposed Project is approximately 0.31 million gallons per day (MGD). After accounting for existing potable water demands at Proposed Project sites, the net increase in potable water demands for buildout of the Proposed Project is approximately 0.28 MGD. Potable water demands for the Proposed Project were calculated based on unit water use factors from the City's 2021 Water System Master Plan (WSMP). This WSA uses water demand projections for the City as presented in the City's 2020 Urban Water Management Plan (UWMP).



## Water Supply Availability and Reliability

If approved by the City, the Proposed Project would be served from the City's existing and future portfolio of water supplies. These supplies include the following sources:

- Treated surface water from the City and County of San Francisco's Regional Water System (RWS), operated by the San Francisco Public Utilities Commission (SFPUC), served through four connections to the City's system;
- Treated surface water purchased from North Coast County Water District (NCCWD); and
- Local groundwater from the Westside Groundwater Basin.

According to the City's 2020 UWMP and the technical analysis outlined in this WSA, the City does not anticipate water supply shortages during normal water years through 2045. However, the City's water supplies are not adequate to meet projected demands in single dry years and multiple dry years. Supply shortfalls, ranging from 5 to 19 percent in the first year of the five-year dry period to 2 to 24 percent in the fifth year of the five-year dry period, are projected. This shortfall is primarily due to significant cutbacks in the City's supply from SFPUC which is significantly reduced in dry years due to the Bay-Delta Plan Amendment. It should be noted that projected demands were not reduced in dry years to remain conservative.

In the event of any water shortages, the City will implement the provisions of its Water Shortage Contingency Plan (WSCP) to reduce water demand and make up the supply deficit. The WSCP stages required to achieve the necessary demand reductions range from Stage 1 to Stage 3. The Proposed Project, if approved, would be subject to the same water use restrictions as other City water customers if the WSCP is implemented.





## 1.0 INTRODUCTION

The purpose of this Water Supply Assessment (WSA) is to perform the evaluation required by California Water Code (Water Code) sections 10910 through 10915 in connection with the Proposed Project. Key topics covered in this introduction include:

- Legal Requirements for a WSA
- Need for and Purpose of WSA
- Water Supply Assessment Preparation, Format, and Organization

### 1.1 Legal Requirements for a Water Supply Assessment

California Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 were companion measures that sought to promote more collaborative planning between local water suppliers and cities and counties. Both statutes require detailed information regarding water availability be provided to the city and county decision makers prior to approval of large development projects. The purpose of providing such information is to ensure that prudent water supply planning has been conducted and that planned water supplies are adequate to meet existing demands and anticipated demands from approved or proposed projects.

SB 610 amended Water Code sections 10910 through 10915 to require agencies responsible for land use decisions to:

- Identify the public water purveyor(s) that may supply water for a proposed development project; and
- Request a WSA from the identified water purveyor(s).

The City of San Bruno (City) is the identified water purveyor for the Proposed Project. The purpose of the WSA is to demonstrate the sufficiency of the purveyor's water supplies to satisfy the water demands of the Proposed Project, while still meeting the water purveyor's obligations with regard to existing and planned future uses. Water Code sections 10910 through 10915 delineate the specific information that must be included in the WSA.

SB 221 amended State law (California Government Code Section 66473.7) to require that approval by a city or county of certain residential subdivisions<sup>1</sup> requires an affirmative written verification of sufficient water supply. SB 221 was intended as a fail-safe mechanism to ensure that collaboration on finding the needed water supplies to serve a new large residential subdivision occurs before construction begins.

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<sup>1</sup> Per Government Code Section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 dwelling units.



## **1.2 Need for and Purpose of Water Supply Assessment**

The purpose of this WSA is to perform the evaluation required by Water Code sections 10910 through 10915 (SB 610) in connection with the Proposed Project. This WSA is not intended to reserve water, or to function as a “will serve” letter or any other form of commitment to supply water (see Water Code Section 10914), nor is it intended to meet the requirements of SB 221. The provision of water service will continue to be undertaken in a manner consistent with applicable City policies and procedures, consistent with existing law.

## **1.3 Water Supply Assessment Preparation, Format and Organization**

The format of this WSA is intended to clearly delineate compliance with the specific requirements for a WSA, per Water Code sections 10910 through 10915. This WSA includes the following sections:

- Section 1: Introduction
- Section 2: Description of Proposed Project
- Section 3: Required SB 610 Determinations
- Section 4: City of San Bruno Water Demands
- Section 5: City of San Bruno Water Supplies
- Section 6: Water Supply Reliability
- Section 7: Determination of Water Supply Sufficiency Based on the Requirements of SB 610
- Section 8: Water Supply Assessment Approval Process
- Section 9: References

Relevant citations of Water Code sections 10910 through 10915 are included throughout this WSA in *italics* to demonstrate compliance with the specific requirements of SB 610.



## 2.0 DESCRIPTION OF PROPOSED PROJECT

The Regional Housing Needs Allocation (RHNA) Plan process identifies the total number of housing units, separated into four affordability levels, that every local government in the Bay Area must plan to accommodate for the period from 2023 to 2031. The primary role of the RHNA methodology is to encourage a pattern of housing growth for the Bay Area that meets the needs of all residents.

The City's RHNA is 3,165 housing units, which was determined by the Association of Bay Area Governments (ABAG) and a partnership between all 21 jurisdictions in San Mateo County (County) known as 21 Elements. As part of the RHNA process, the City is required to update the Housing Element of its General Plan to show how it plans to accommodate its RHNA housing units. To accommodate its RHNA, the City has identified several opportunity sites for future development. The Proposed Project includes these opportunity sites, Pipeline Projects (i.e., projects approved by the City's Planning Department), and Accessory Dwelling Units (ADUs).

The City's updated Housing Element includes 3,616 housing units, about 450 more than its RHNA. Of these 3,616 units, only 2,122 units are included in the Proposed Project evaluated in this WSA. The other 1,494 housing units were previously included in WSAs for the Transit Corridors Plan and the Bayhill Specific Plan.<sup>2</sup>

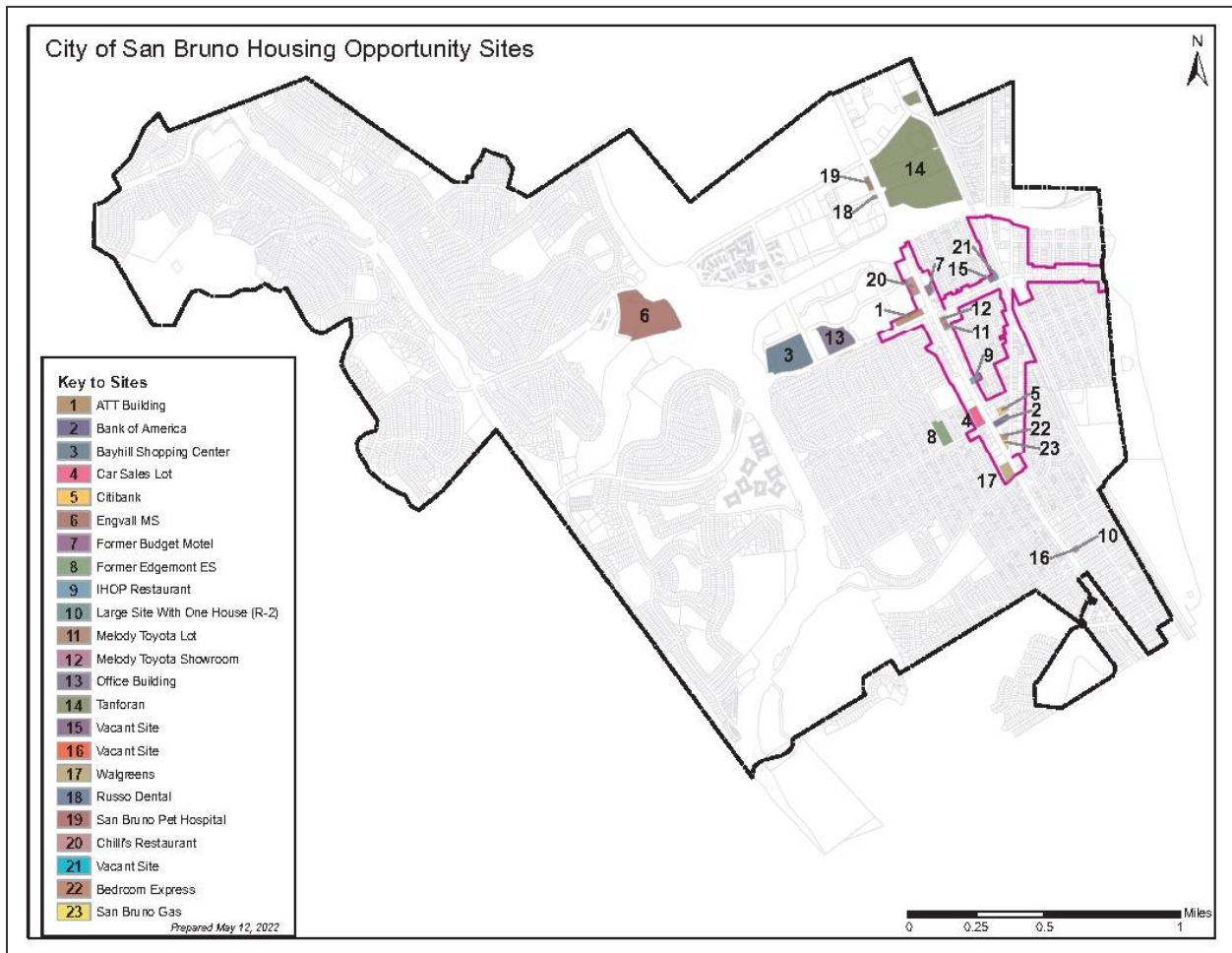
The following sections provide a general description of the Proposed Project location, proposed land uses, and projected water demand.

### 2.1 Proposed Project Location

The Proposed Project would be constructed on existing sites scattered throughout the City. Figure 2-1 shows the proposed RHNA housing opportunity sites. As noted above, opportunity sites located within the Transit Corridors Plan and Bayhill Specific Plan areas are not included in the Proposed Project evaluated in this WSA.

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<sup>2</sup> Erler & Kalinowski, Inc., June 2011, City of San Bruno, Water Supply Assessment for Transit Corridors Plan; West Yost, September 2019, City of San Bruno, Water Supply Assessment for Bayhill Specific Plan.



Source: Provided by David J. Powers & Associates in May 2022

**Figure 2-1. City of San Bruno Housing Opportunity Sites**

## 2.2 Proposed Land Uses

The City’s updated Housing Element includes 3,616 housing units, about 450 more than its RHNA. Table 2-1 lists the opportunity sites and associated housing unit capacities as provided by David J. Powers & Associates, who is preparing the Initial Study/Mitigated Negative Declaration (IS/MND) for the Proposed Project. Of these 3,616 units, only 2,122 are included in the Proposed Project evaluated in this WSA. The other 1,494 housing units were previously included in WSAs for the Transit Corridors Plan (TCP) and Bayhill areas (refer to Plan Area column in Table 2-1). All 2,122 housing units included in the Proposed Project are assumed to come online by 2031.

# Housing Element Update Water Supply Assessment



**Table 2-1. City of San Bruno Updated Housing Element Opportunity Sites**

Site ID	Address (APN)	Plan Area	Housing Unit Capacity
1 - AT&T Building	840 San Bruno Avenue (020-071-050)	TCP	320
2 - Bank of America	465 San Mateo Avenue (020-362-180)	TCP	45
3 - Bayhill Shopping Center	851 Cherry Avenue (020-012-190)	Bayhill	210
4 - Automobile retail	529 El Camino Real <sup>(a)</sup>	TCP	72
5 - Citibank	475 San Mateo Avenue (020-361-240)	TCP	60
6 - Engvall Middle School	2101 Sneath Lane (019-270-260; -270)	Other	118
7 - Vacant Motel	850 El Camino Real (020-116-310)	TCP	60
8 - Edgemont Elementary School	500 Acacia Avenue (020-253-050)	Other	15
9 - Restaurant /Parking Lot	590 El Camino Real (020-145-010; -020; -030; -470)	TCP	42
10 - Residential	117 San Marco Avenue (021-172-130)	Other	2
11 - Melody Toyota Lot	750 El Camino Real (020-126-050; -140)	TCP	41
12 - Melody Toyota Showroom	750 El Camino Real (020-126-200)	TCP	32
13 - Office Building	801-851 Traeger Avenue (020-017-020)	Bayhill	205
14 - Tanforan Shopping Center <sup>(b)</sup>	1122-1150 El Camino Real and 1292 Huntington Avenue (014-316-240; -300; -330; -360; 014-311-060)	Other	1,000
15 - Vacant Lot	170 San Bruno Avenue (020-111-160)	TCP	42
16 - Vacant Lot	San Marco Avenue (021-172-120)	Other	2
17 – Walgreens	333 El Camino Real (020-293-030)	TCP	150
18 - Medical Office	1101 El Camino Real (020-013-200)	Other	15
19 - Veterinary Office	1151 El Camino Real (020-013-100)	Other	60
20 – Restaurant	899 El Camino Real (020-019-080)	TCP	100
21 - Vacant Lot	104 San Bruno Avenue (020-111-150)	TCP	25
22 – Retail	426 El Camino Real (020-362-240)	TCP	50
23 - Gas Station	401 San Mateo Avenue (020-362-210)	TCP	40
Pipeline Projects <sup>(c)</sup>	(multiple)	Other	670
Accessory Dwelling Units	(multiple)	Other	240
<b>Total Units</b>			<b>3,616</b>

Source: "Housing Inventory Table" from an email correspondence with David J. Powers & Associates in May 2022; updated in November 2022.

- (a) Includes APNs: 020-256-090; -100; -130; -140; -150; -160; -170; -180; -190; -250; -260; -270; -280; -320; -340; -350.
- (b) Includes only the residential portion of the proposed Tanforan Shopping Center redevelopment.
- (c) Projects approved by the City's Planning Department.



## **2.3 Projected Water Demand**

The methodology and projections of the water demand associated with the Proposed Project are presented below.

### ***2.3.1 Water Use Factors and Assumptions***

As part of its 2021 Water System Master Plan (WSMP),<sup>3</sup> the City adopted unit water use factors (also referred to as unit water demand factors) to project potable water demand using proposed future land uses within the City. This WSA estimates potable water demands for the Proposed Project based on these factors and, because the density of the proposed housing units is currently undefined, the conservative assumption that all proposed units will have a water demand equivalent to single family residences. The water use factor used in this WSA is 147 gallons per day per dwelling unit (gpd/DU).

### ***2.3.2 Existing Water Demand***

Existing water demands for the Proposed Project were evaluated to determine the overall net increase in water demand associated with the Proposed Project and are based on 2019 metered water consumption data used in the City's 2021 WSMP. To remain consistent with demand projections for the Proposed Project, consumption data was adjusted assuming a non-revenue water (NRW) value of 8 percent.

Table 2-2 presents the existing potable water demands for parcels associated with the Proposed Project in units of hundred cubic feet (CCF) per year and gpd. Existing water demands could only be identified for 20 of the 49 parcels associated with the Proposed Project. The remaining 29 parcels were parking lots or vacant in 2019, so it is reasonable they would not have any water use in 2019. As shown in Table 2-2, the total existing potable water demand for those 20 parcels is approximately 30,550 gpd (0.031 MGD).

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<sup>3</sup> City of San Bruno, December 2021. Water System Master Plan Final Report.

**Table 2-2. Existing Water Demands at Project Sites**

Site ID - Existing Use	Address (APN)	2019 Metered Consumption, <sup>(b)</sup> CCF	Existing Water Demand <sup>(a)</sup>	
			CCF/year	gpd
6 - Engvall Middle School	2101 Sneath Lane (019-270-260)	6,926	7,528	15,428
6 - Engvall Middle School	2101 Sneath Lane (019-270-270)	0	0	0
8 - Edgemont Elementary School	500 Acacia Avenue (020-253-050)	400	435	891
10 - Residential	116 San Marco Avenue (021-172-130)	N/A <sup>(c)</sup>	--	--
14 - Tanforan Shopping Center <sup>(b)</sup>	1292 Huntington Avenue (014-311-060)	N/A <sup>(c)</sup>	--	--
16 - Vacant Lot	San Marco Avenue (021-172-120)	N/A <sup>(c)</sup>	--	--
18 - Medical Office	1101 El Camino Real (020-013-200)	890	967	1,982
19 - Veterinary Office	1151 El Camino Real (020-013-100)	466	507	1,038
Pipeline - Glenview Terrace	2880 Glenview Dr. (019-042-150)	N/A <sup>(c)</sup>	--	--
Pipeline - Glenview Terrace	2890 Glenview Dr. (019-042-160)	N/A <sup>(c)</sup>	--	--
Pipeline - Glenview Terrace	850 Glenview Dr (019-042-170)	54	59	120
Pipeline - 111 San Bruno	111 San Bruno Ave (020-121-350)	5	5	11
Pipeline - Mills Park	751 Camino Plaza (020-072-030)	474	515	1,056
Pipeline - Mills Park	Camino Plaza (020-072-040)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	721 Camino Plaza (020-072-050)	0	0	0
Pipeline - Mills Park	711 Camino Plaza (020-072-060)	1,104	1,200	2,459
Pipeline - Mills Park	730-738 Kains Ave (020-072-070)	1,044	1,135	2,326
Pipeline - Mills Park	750 Kains Ave (020-072-310)	351	382	782
Pipeline - Mills Park	751 San Bruno Ave (020-072-320)	915	995	2,038
Pipeline - Mills Park	El Camino Real (020-075-080)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	715 El Camino Real (020-075-090)	432	470	962
Pipeline - Mills Park	El Camino Real (020-075-100)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	799 El Camino Real (020-075-110)	138	150	307
Pipeline - Mills Park	Linden Ave (020-076-090)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	Linden Ave (020-076-100)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	Linden Ave (020-076-110)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	Linden Ave (020-076-120)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	Linden Ave (020-076-130)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	751 Kains Ave (020-076-160)	5	5	11
Pipeline - Mills Park	Linden Ave (020-076-200)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	655 El Camino Real (020-076-220)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	643 El Camino Real (020-076-230)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	601 El Camino Real (020-076-240)	129	140	287
Pipeline - Mills Park	675 El Camino Real (020-076-250)	181	197	403
Pipeline - Mills Park	711 Kains Ave (020-076-260)	201	218	448
Pipeline - Mills Park	601 El Camino Real (020-096-050)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	601 El Camino Real (020-096-060)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	601 El Camino Real (020-096-070)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	601 El Camino Real (020-096-080)	N/A <sup>(c)</sup>	--	--
Pipeline - Mills Park	601 El Camino Real (020-096-090)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-590)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-690)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-700)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-730)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-790)	N/A <sup>(c)</sup>	--	--
Pipeline - Lee's Buffet	271 El Camino Real (020-406-870)	N/A <sup>(c)</sup>	--	--
Pipeline - Melody Toyota sales lot	732 El Camino Real (020-126-160)	N/A <sup>(c)</sup>	--	--
Pipeline - Melody Toyota sales lot	740 El Camino Real (020-126-080)	N/A <sup>(c)</sup>	--	--
Pipeline - 500 Sylvan Ave	500 Sylvan Ave (020-145-480)	0	0	0
<b>Total</b>		<b>13,715</b>	<b>14,908</b>	<b>30,550</b>

(a) Existing demands equal 2019 metered consumption adjusted for 8 percent NRW.

(b) Provided by the City during the development of the City of San Bruno Water System Master Plan, December 2021.

(c) Not applicable - 2019 consumption data could not be identified for this APN.





**2.3.3 Projected Water Demand Calculations**

Table 2-3 presents the estimated potable water demands for the Proposed Project in gallons per day (gpd). The potable water demand for the Proposed Project is approximately 312,000 gpd (0.312 MGD). After accounting for existing demands at Proposed Project sites, the net increase in water demand for the Proposed Project is approximately 281,000 gpd (0.281 MGD).

<b>Table 2-3. Estimated Potable Water Use for the Proposed Project</b>			
<b>Site ID<sup>(a)</sup></b>	<b>Housing Unit Capacity</b>	<b>Water Use Factor,<sup>(b)</sup> gpd /DU</b>	<b>Water Demand, gpd</b>
6 - Engvall Middle School	118	147	17,346
8 - Edgemont Elementary School	15	147	2,205
10 - Residential	2	147	294
14 - Tanforan Shopping Center(c)	1,000	147	147,000
16 - Vacant Lot	2	147	294
18 - Medical Office	15	147	2,205
19 - Veterinary Office	60	147	8,820
Pipeline Projects	670	147	98,490
Accessory Dwelling Units	240	147	35,280
<b>Project Total</b>	<b>2,122</b>	<b>-</b>	<b>311,934</b>
<b>Existing Demand at Proposed Project Sites<sup>(d)</sup></b>			<b>30,550</b>
<b>Net Increase in Demand for Proposed Project</b>			<b>281,384</b>
(a) Proposed Project sites and units from Table 2-1. (b) From Table 3-10 of the City's 2021 WSMP. Water use factors include 8 percent of non-revenue water. Because the density of proposed housing units at each site is unknown, this WSA conservatively assumes that all proposed units will have a water demand equivalent to single family residences (i.e., higher water use). (c) Includes only the residential portion of the proposed Tanforan Shopping Center redevelopment. (d) Refer to Table 2-2.			





## 3.0 REQUIRED SB 610 DETERMINATIONS

The following determinations must be made, pursuant to SB 610.

### 3.1 Does SB 610 Apply to the Proposed Project?

*10910 (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.*

*10912 (a) "Project" means any of the following:*

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

Based on the following assumptions, SB 610 does apply to the Proposed Project.

- The Proposed Project is subject to California Environmental Quality Act (CEQA), and an Environmental Impact Report (or IS/MND) is required.
- One of the Proposed Project opportunity sites (Tanforan Shopping Center) will include the development of 1,000 residential DUs, which meets the definition of a "Project" as specified in Water Code Section 10912(a) paragraphs (1) and (7) (see above).

The Proposed Project as summarized in Table 2-3 has not been the subject of a previously adopted WSA and has not been included in an adopted WSA for a larger project. Therefore, according to Water Code Section 10910(a), a WSA is required for the Proposed Project.

### 3.2 Does SB 221 Apply to the Proposed Project?

In 2001, SB 221 amended State law to require that approval by a city or county of certain residential subdivisions requires an affirmative written verification of sufficient water supply. Per California Government Code section 66473.7(a)(1), a subdivision means a proposed residential development of more than 500 DUs. One of the Proposed Project opportunity sites (Tanforan Shopping Center), with its proposed 1,000 residential DUs, therefore may be subject to the requirements of SB 221. A verification of sufficient water supply (SB 221) may be required for this site prior to final approvals.



### **3.3 Who is the Identified Public Water System?**

*10910(b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined by Section 10912, that may supply water for the project.*

*10912 (c) "Public water system" means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections...*

The Proposed Project area is located within the City limits and in the City's water service area. Therefore, the City is the identified public water system for the Proposed Project.

### **3.4 Does the City have an adopted UWMP and does the UWMP include the projected water demand for the Proposed Project?**

*10910(c)(1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).*

The City's 2020 Urban Water Management Plan (UWMP) was adopted by the San Bruno City Council in October 2021 and is incorporated by reference into this WSA. The City's 2020 UWMP included existing and projected water demands for existing and projected future land uses to be developed through the year 2045. The water demand projections in the City's 2020 UWMP included the water demand projections for the Proposed Project.



## 4.0 CITY OF SAN BRUNO WATER DEMANDS

*10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*

*10910(c)(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system’s total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.*

The projected water demand associated with the Proposed Project was accounted for in the City’s 2020 UWMP. Existing and projected water demands from the City’s 2020 UWMP are critical for evaluating the City’s ability to meet projected water demand associated with the Proposed Project. Therefore, this section summarizes existing and projected water demands in normal and dry years (as presented in the City’s 2020 UWMP).

### 4.1 Historical and Current Water Use

The City’s historical and current (FY 2019/20) water use among its various water use sectors is presented in Table 4-1.

Water Use Sector	Water Use, MGD			
	FY 2004/05	FY 2009/10	FY 2014/15	FY 2019/20
Residential	2.78	2.48	2.14	2.14
Commercial	0.52	0.59	0.62	0.55
Governmental (City Parks and Facilities)	-	0.17	0.13	0.18
Other	0.32	0.01	-	-
Water Losses	0.15	0.40	0.25	0.25
<b>Total, MGD</b>	<b>3.76</b>	<b>3.65</b>	<b>3.14</b>	<b>3.12</b>

*Source: City of San Bruno 2020 UWMP, November 2021. Table 4-1.*

### 4.2 Projected Water Demand

The City is expected to be built out by 2040, when potable water demands are projected to reach 4.78 MGD. Table 4-2 summarizes the City’s existing and projected potable water demands, as presented in its 2020 UWMP. As shown in Table 4-2, the City does not anticipate the future use of recycled water within its service area.



**Table 4-2. City of San Bruno Existing and Projected Potable and Raw Water Demand in Normal Years**

Units	2020, Actual	2025	2030	2035	2040	2045
Potable Water, MGD	3.12	3.53	3.95	4.37	4.78	4.78
Recycled Water, MGD	0	0	0	0	0	0
<b>Total, MGD</b>	3.12	3.53	3.95	4.37	4.78	4.78

Source: City of San Bruno 2020 UWMP, November 2021. Tables 4-1 and 4-3.

### 4.3 Projected Water Demand – Dry Years

The City currently has a Water Shortage Contingency Plan (WSCP) in place, as described in Appendix I of the City’s 2020 UWMP. The City assumed in its 2020 UWMP that water demand in single dry or multiple dry years would be equal to normal year water demand. This is a conservative assumption as additional water conservation would likely occur in the event of drought or another water supply shortage or emergency due to the implementation of additional water conservation measures outlined in the City’s WSCP. The City’s WSCP includes a six-stage plan describing specific actions to reduce water demand by greater than 50 percent in the event of a water supply shortage or emergency. The water shortage stages, and their respective anticipated reduction in potable water demand, are shown in Table 4-3.

**Table 4-3. City of San Bruno Water Shortage Levels**

Level	Percent Supply Reduction
1	Up to 10 percent
2	Up to 20 percent
3	Up to 30 percent
4	Up to 40 percent
5	Up to 50 percent
6	More than 50 percent

Source: City of San Bruno 2020 UWMP, November 2021. Appendix I, Table 3.



## 5.0 CITY OF SAN BRUNO WATER SUPPLIES

*10910(c)(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f) and (g).*

*10910(d)(1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.*

*10910(d)(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:*

- (A) Written contracts or other proof of entitlement to an identified water supply.*
- (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.*
- (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.*
- (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.*

*10910(e) If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water supply assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract-holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water supply assessments.*

*10910(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment.*

- (1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.*
- (2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most recent bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.*



- (3) *A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.*
- (4) *A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historical use records.*
- (5) *An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.*

The following descriptions are adapted from the City's 2020 UWMP (adopted in October 2021).

## 5.1 Water Supply Overview

The City currently utilizes water from the following sources:

- Treated surface water from the City and County of San Francisco's Regional Water System (RWS), operated by the San Francisco Public Utilities Commission (SFPUC), served through four connections to the City's system;
- Treated surface water purchased from North Coast County Water District (NCCWD); and
- Local groundwater from the Westside Groundwater Basin.

### 5.1.1 SFPUC Regional Water System

#### 5.1.1.1 SFPUC Regional Water System Overview

The City and County of San Francisco's RWS, operated by SFPUC, is predominantly supplied from runoff and snowmelt from the Sierra Nevada delivered through the Hetch Hetchy aqueducts, but also includes treated water produced by SFPUC from its local watersheds and facilities in Alameda and San Mateo counties.

The amount of imported water available to SFPUC's retail and wholesale customers is constrained by hydrology, physical facilities, and the institutional parameters that allocate the water supply of the Tuolumne River. Due to these constraints, the SFPUC is very dependent on reservoir storage to increase the reliability of its water supplies.

#### 5.1.1.2 Individual Supply Guarantee

San Francisco has a perpetual commitment (Supply Assurance) to deliver 184 MGD to the 24 permanent Wholesale Customers collectively. San Jose and Santa Clara are not included in the Supply Assurance commitment and each has temporary and interruptible water supply contracts with San Francisco. The Supply Assurance is allocated among the 24 permanent Wholesale Customers through Individual Supply



Guarantees (ISG), which represent each Wholesale Customer's allocation of the 184 MGD Supply Assurance. The City's ISG is 3.25 MGD.

### 5.1.1.3 2018 Amended and Restated Water Supply Agreement

The business relationship between SFPUC and its wholesale customers is largely defined by the Water Supply Agreement between SFPUC and wholesale customers in Alameda County, San Mateo County and Santa Clara County. In July 2009, the Water Supply Agreement replaced the Settlement Agreement and Master Water Sales Contract that expired in June 2009, and in 2018, an Amended and Restated Water Supply Agreement was adopted. The Water Supply Agreement addresses the rate-making methodology used by SFPUC in setting wholesale water rates for its wholesale customers and includes a Water Shortage Allocation Plan (WSAP) that describes the method for allocating water from the RWS between Retail and Wholesale Customers during system-wide shortages of 20 percent or less. The WSAP, also known as the Tier One Plan, was amended in the 2018 Amended and Restated Water Supply Agreement. The Wholesale Customers' share is apportioned among the individual Wholesale Customers based on a separate methodology adopted by the Wholesale Customers, known as the Tier Two Plan. The Tier Two Plan, which initially expired in 2018, has been extended by the Bay Area Water Supply and Conservation Agency (BAWSCA) Board of Directors every year since for one additional calendar year. In November 2021, the BAWSCA Board voted to extend the Tier Two Plan through the end of 2022.

### 5.1.1.4 2028 SFPUC Decisions

In the 2009 Water Supply Agreement, 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
- Whether or not to increase the wholesale customer Supply Assurance above 184 MGD

However, SFPUC was not able to conduct the necessary water supply planning and California Environmental Quality Act (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, SFPUC has established an Alternative Water Supply Planning program to evaluate several regional and local water supply options. Through this program, 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.

### 5.1.1.5 Bay Area Water Supply and Conservation Agency

The City is a member of BAWSCA. BAWSCA was created on May 27, 2003 to represent the interests of the 26 cities, water districts, and private utilities in Alameda, Santa Clara and San Mateo counties that purchase water on a wholesale basis from the RWS.

BAWSCA is the only entity having the authority to directly represent the needs of the cities, water districts and private utilities (wholesale customers) that depend on the RWS. BAWSCA provides the ability for the





customers of the RWS to work with San Francisco on an equal basis to ensure the water system gets fixed, and to collectively and efficiently meet local responsibilities.

BAWSCA has the authority to coordinate water conservation, supply and recycling activities for its members; acquire water and make it available to other agencies on a wholesale basis; finance projects, including improvements to the RWS; and build facilities jointly with other local public agencies or on its own to carry out the agency's purposes.

### **5.1.2 NCCWD**

Water purchased from the NCCWD is also from the RWS, but is delivered to the City via NCCWD's system, and is used exclusively to meet the demands of the Crystal Springs Terrace Apartments, located in the City's Pressure Zone 13.

The City purchases water from NCCWD under the terms of Resolution No. 2001-52, Intertie and Water Service Agreement. The cost of water purchased from NCCWD is set according to NCCWD's Rate and Fee Schedule for governmental multi-unit residential property. There is no contractual limit to the quantity of water the City may purchase from NCCWD, except that purchases are "only such water service as [NCCWD] can normally render".

The City purchases approximately 0.05 MGD of water from the NCCWD. This water is served from the Crystal Springs turnout in Pressure Zone 13. The City does not anticipate any changes to its NCCWD water supply in the near future.

### **5.1.3 Groundwater**

Local groundwater supply for the City is from the Westside Basin, which is used by the cities of San Bruno, Daly City, and South San Francisco.<sup>4</sup> The City operates multiple production wells that extract groundwater from the central portion of the 40 square mile Westside Basin. The City has used groundwater as a source of supply since the early 1900s. Prior to 2016, groundwater use comprised about 50 percent of the City's total water supply. In 2016, the City reduced its use of groundwater in accordance with the Regional Groundwater Storage and Recovery Project (Regional GSR Project).

The following sections provide a description of the Westside Basin and current management efforts within the Westside Basin.

#### **5.1.3.1 Westside Basin Description**

The City overlies the central portion of the 40 square mile Westside Basin. The Westside Basin consists of unconsolidated colluvium that was deposited in a northwest trending trough in the underlying impervious bedrock. The Westside Basin is bounded by bedrock highs in Golden Gate Park to the north and at Coyote Point to the south. San Bruno Mountain and San Francisco Bay form the eastern boundary of the Westside Basin, while the Serra Fault and the Pacific Ocean form the western boundary. Adjoining groundwater basins are the Lobos Basin to the north and the San Mateo Plain Aquifer to the south.

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<sup>4</sup> The northern portion of the Westside Basin is managed by SFPUC.





The Westside Basin has been separated into two distinct areas for management purposes. These two areas have been defined as the North Westside Basin Area and the South Westside Basin Area. The City is located within the South Westside Basin Area. The South Westside Basin has not been adjudicated.

### 5.1.3.2 Groundwater Management and Sustainability

#### 5.1.3.2.1 South Westside Basin Groundwater Management Plan

In 2006, the City received a grant from California Department of Water Resources' Local Groundwater Assistance fund to develop a Groundwater Management Plan (GWMP) for the southern portion of the Westside Basin, which extends from Daly City to Burlingame (South Westside Basin). Municipalities that overlie the South Westside Basin include Daly City, Colma, South San Francisco, San Bruno, Millbrae and Burlingame. Groundwater within this portion of the basin generally flows toward pumping centers within Daly City, San Bruno and South San Francisco.

The South Westside Basin GWMP was completed in July 2012 by the City, in coordination with the City of Daly City, Cal Water, SFPUC, and other stakeholders. This GWMP was developed to provide a framework for regional groundwater management in the South Westside Basin that sustains the beneficial use of the groundwater resource. This framework includes the following objectives: informing the public of the importance of groundwater to the South Westside Basin and the challenges and opportunities it presents; developing consensus among stakeholders on issues and solutions related to groundwater; building relationships among stakeholders within the basin and between state and federal agencies; and defining actions for developing programs to ensure the long-term sustainability of groundwater resources in the South Westside Basin.

The goal of the GWMP is to ensure a sustainable, high quality, reliable water supply at a fair price for beneficial uses achieved through local groundwater management. The GWMP provides steps for monitoring water quality and quantity in the basin. Each groundwater well in the basin has defined triggers for overdraft, seawater intrusion, and various water quality measures. The GWMP identifies two levels of trigger thresholds for each groundwater well based on historical water levels, and actions to address the trigger that is met.

The GWMP indicates that the South Westside Basin is not in overdraft, and that the City can sustain a groundwater production rate of 2.1 MGD on a long-term basis. While not anticipated, groundwater production could be limited if local monitoring wells detect overdraft is occurring in the vicinity of the City's wells.

#### 5.1.3.2.2 Sustainable Groundwater Management Act

The Sustainable Groundwater Management Act of 2014 (SGMA), a three-bill legislative package composed of AB 1739, SB 1168, and SB 1319, was passed in September 2014. The legislation provides a framework for sustainable management of groundwater supplies by local authorities, with a limited role for state intervention when necessary to protect the resource. The legislation lays out a process and a timeline for local authorities to achieve sustainable management of groundwater basins. It also provides tools, authorities and deadlines to take the necessary steps to achieve the goal. For local agencies involved in implementation, the requirements are significant and can be expected to take years to accomplish. The State Water Resources Control Board may intervene if local agencies do not form a Groundwater Sustainability Agency (GSA) and/or fail to adopt and implement a Groundwater Sustainability Plan (GSP).



The Westside Basin has been ranked as a Very Low priority basin. As a Very Low priority basin, the Westside Basin users are not mandated to form a GSA or develop a GSP at this time.

### 5.1.3.3 Regional Groundwater Storage and Recovery Project

In December 2014, the Regional GSR Project operating agreement was signed to ensure long-term management and sustainability of the South Westside Groundwater Basin through a strategic conjunctive use partnership. The partnership with the City, SFPUC, California Water Service (serving South San Francisco and Colma), and the City of Daly City allows the agencies to operate the basin jointly and provides a new 20-billion gallon regional dry year groundwater supply. The project is included as part of a larger SFPUC Water Supply Improvement Program.

The Regional GSR Project is an in-lieu groundwater recharge program that balances groundwater and RWS surface water supply to increase drought year water supplies. As a participant, the City has two supply modes. During wet and average years, (termed ‘put’ years, when in-lieu groundwater banking occurs), water from the RWS is delivered to the City, which reduces the City’s need to pump groundwater and allows the basin to naturally recharge and store additional water supply. The amount of additional surface water delivered in-lieu of groundwater will be “banked” by SFPUC until it is needed during a drought or emergency. In dry years (termed ‘take’ years), the City will maximize its use of groundwater and supplement with surface water and SFPUC “banked” groundwater supply, as needed.

Each year, SFPUC will notify the City if SFPUC will be providing additional surface water supplies to offset the City’s groundwater pumping. The City retains its full 2.1 MGD groundwater right, but a portion of that water right may be fulfilled by SFPUC in-lieu surface water. The City implemented the Regional GSR Project conjunctive use operations starting in 2016.

Imported water supply from SFPUC may also partially consist of groundwater during dry years. Under Phase 1 of the Regional GSR Project, 13 new groundwater production well facilities have been constructed in Northern San Mateo County. These new well facilities are connected to the SFPUC transmission system and may pump “banked” groundwater and deliver it as part of the SFPUC supply. Phase 2 of the Regional GSR Project includes the construction of three test wells, completion of the South San Francisco Main well and pipeline, and the installation of chemical system monitoring, sampling, and storage at various sites. Phase 2 is projected to be complete in 2022.

### 5.1.3.4 Historical Groundwater Use

The City currently operates four groundwater wells. As shown in Table 5-1, prior to 2016, groundwater use comprised about 50 percent of the City’s total water supply. In 2016, the City reduced its use of groundwater to about 10 percent of its total water supply in accordance with the Regional GSR Project.



**Table 5-1. Groundwater Volume Pumped by the City<sup>(a)</sup>**

Water Source	Volume of Water Pumped, MGD					Average, MGD
	FY 2015/16	FY 2016/17	FY 2017/18	FY 2018/19	FY 2019/20	
South Westside Groundwater Basin, DWR Basin 2-35	1.63	0.27	0.32	0.29	0.23	0.55
Groundwater Production as a Percentage of Total Supply	53.6%	9.3%	10.5%	9.7%	7.4%	18.1% <sup>(b)</sup>
						9.2% <sup>(c)</sup>

(a) City of San Bruno 2020 UWMP, November 2021. Table 6-3.  
 (b) Average groundwater production as a percentage of total supply from FY 2015/16 to FY 2019/20.  
 (c) Average groundwater production as a percentage of total supply from FY 2016/17 to FY 2019/20 (i.e., after the City reduced its use of groundwater in accordance with the Regional GSR Project).

### 5.1.3.5 Projected Groundwater Use

The City’s projected maximum groundwater production from FY 2024/25 to FY 2044/45 in five-year increments is provided in Table 5-2. During ‘put’ years, the City will maximize surface water deliveries and reduce use from its wells. It should be noted that the City retains its full 2.1 MGD groundwater right, but a portion of that water right may be fulfilled by SFPUC in-lieu surface water.

**Table 5-2. Projected Groundwater Production During ‘Take’ Years<sup>(a,b)</sup>**

Water Source	FY 2024/25	FY 2029/30	FY 2034/35	FY 2039/40	FY 2044/45
Groundwater Production, MGD	2.10	2.10	2.10	2.10	2.10

(a) City of San Bruno 2020 UWMP, November 2021. Table 6-4.  
 (b) In ‘put’ years, a portion or all of the City’s groundwater production may be offset by SFPUC surface water for in-lieu banking (see Section 6.2.2.3).

As shown in Table 5-2, the City projects future groundwater production at its current rate during ‘take’ years. However, the City is evaluating whether it can increase its production of groundwater to a rate of 2.7 MGD, which is consistent with a historical maximum annual production rate. The City will coordinate with other basin users to ensure the groundwater basin is managed sustainably and in a manner consistent with the consensus driven basin yield analysis based on the GWMP.

It should be noted that the SFPUC imported water supply may also partially consist of groundwater during dry years. Under the Regional GSR Project, new groundwater production well facilities are proposed in Northern San Mateo County. Up to 16 new groundwater well facilities would be constructed at 16 of the 19 proposed sites. These new well facilities would be connected to Daly City, San Bruno and/or Cal Water’s water distribution systems and may pump “banked” groundwater and deliver it as part of the SFPUC supply.

## 5.2 Recycled Water

The City does not currently have a recycled water system and does not intend to develop one because recycled water is not a cost-effective water supply source for the City within the foreseeable future.



### 5.3 Future Water Projects

As described above, the Regional GSR Project is ongoing and is intended to ensure long-term management and sustainability of the South Westside Basin. The City does not have any planned future water supply projects.

### 5.4 Summary of Existing and Planned Sources of Water

The City has two supply modes: (1) during wet and average years ('put' years), additional surface water is delivered to the City by the SFPUC, in-lieu of the City pumping groundwater, and (2) during drought years ('take' years), the City will maximize its use of groundwater and supplement with surface water to minimize the use of SFPUC supply. A summary of the City's existing sources of water during 'put' years and 'take' years is provided in Table 5-3 and compared with actual FY 2019/20 water use.

Water Source	Available During 'Put' Years	Available During 'Take' Years	FY 2019/20 Actual
SFPUC, <sup>(b)</sup> MGD	5.35	3.25	2.86
NCCWD, <sup>(c)</sup> MGD	0.05	0.05	0.03
Groundwater, MGD	0.00	2.10	0.23
<b>Total Water Supply, MGD</b>	<b>5.40</b>	<b>5.40</b>	<b>3.12</b>

(a) City of San Bruno 2020 UWMP, November 2021. Table 6-5.  
 (b) SFPUC supply is limited by the City's Individual Supply Guarantee. It is assumed that up to 2.1 MGD of in-lieu surface water will be available from SFPUC in average 'put' years, as part of the Regional GSR Project.  
 (c) NCCWD purchases are governed by the Intertie and Water Service agreement. There is no contractual maximum supply.

The City's projected water supplies during 'put' years and 'take' years are shown in Table 5-4 and Table 5-5, respectively.

Water Source	FY 2024/25	FY 2029/30	FY 2034/35	FY 2039/40	FY 2044/45
SFPUC, <sup>(b)</sup> MGD	5.34	5.32	5.30	5.30	5.31
NCCWD, <sup>(c)</sup> MGD	0.05	0.05	0.05	0.05	0.05
Groundwater, <sup>(b)</sup> MGD	0.00	0.00	0.00	0.00	0.00
<b>Total Projected Water Supply, MGD</b>	<b>5.39</b>	<b>5.37</b>	<b>5.35</b>	<b>5.35</b>	<b>5.36</b>

(a) City of San Bruno 2020 UWMP, November 2021. Table 6-6.  
 (b) During 'put' years, it is assumed that up to 2.1 MGD of the City's groundwater production may be offset by SFPUC surface water for in-lieu banking under the Regional GSR Project.  
 (c) NCCWD purchases assume that the City will purchase the same amount of water as it has historically purchased.

# Housing Element Update Water Supply Assessment



**Table 5-5. Projected Water Supply During 'Take' Years<sup>(a)</sup>**

Water Source	FY 2024/25	FY 2029/30	FY 2034/35	FY 2039/40	FY 2044/45
SFPUC, MGD	3.24	3.22	3.20	3.20	3.21
NCCWD, <sup>(b)</sup> MGD	0.05	0.05	0.05	0.05	0.05
Groundwater, <sup>(c)</sup> MGD	2.10	2.10	2.10	2.10	2.10
<b>Total Projected Water Supply, MGD</b>	<b>5.39</b>	<b>5.37</b>	<b>5.35</b>	<b>5.35</b>	<b>5.36</b>

(a) City of San Bruno 2020 UWMP, November 2021. Table 6-7.

(b) NCCWD purchases assume that the City will purchase the same amount of water as it has historically purchased.

(c) During 'take' years, the City will maximize its groundwater production.



## 6.0 WATER SUPPLY RELIABILITY

*10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*

*10911(a) If, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. If the city or county, if either is required to comply with this part pursuant to subdivision (b), concludes as a result of its assessment, that water supplies are, or will be, insufficient, the city or county shall include in its water supply assessment its plans for acquiring additional water supplies, setting forth the measures that are being undertaken to acquire and develop those water supplies. Those plans may include, but are not limited to, information concerning all of the following:*

- (1) The estimated total costs, and the proposed method of financing the costs, associated with acquiring the additional water supplies. Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.*
- (2) All federal, state, and local permits, approvals, or entitlements that are anticipated to be required in order to acquire and develop the additional water supplies.*
- (3) Based on the consideration set forth in paragraphs (1) and (2), the estimated timeframes within which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), expects to be able to acquire additional water supplies.*

The current reliability of the City's water supply is largely dependent upon its water supply contract with SFPUC and SFPUC's water supply reliability policy. The reliability discussion provided below has been taken, for the most part, from the City's 2020 UWMP (adopted in October 2021).

### 6.1 Reliability of SFPUC Supplies

More than 90 percent of the City's water supply was provided by SFPUC in recent years, either as purchased water under the City's ISG or as in-lieu surface water to offset the City's groundwater production. The reliability of SFPUC's water supplies and the management strategies for addressing these reliabilities are discussed below.

#### 6.1.1 SFPUC Regional Water System Level of Service Goals and Objectives

In 2008, SFPUC adopted Level of Service (LOS) Goals and Objectives in conjunction with the adoption of a Water System Improvement Program (WSIP). The SFPUC updated the LOS Goals and Objectives in February 2020.

The SFPUC LOS Goal for water supply is "to meet customer water needs in non-drought and drought periods."



The SFPUC LOS Objectives related to water supply are as follows:

- Meet all Federal and State regulations to support the proper operation of the water system and related power facilities
- Meet average annual water demand of 265 MGD from the SFPUC watersheds for retail and Wholesale Customers during non-drought years for system demands consistent with the 2009 Water Supply Agreement
- Meet dry-year delivery needs while limiting rationing to a maximum 20 percent system-wide reduction in water service during extended droughts
- Diversify water supply options during non-drought and drought periods
- Improve use of new water sources and drought management, including groundwater, recycled water, conservation, and transfers

### **6.1.2 Adoption of the 2018 Bay Delta Plan Amendment**

#### **6.1.2.1 Background**

In December 2018, the California 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 to 50 percent of the “unimpaired flow”<sup>5</sup> 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 percent of unimpaired flow. 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.

There is much uncertainty surrounding implementation of the Bay-Delta Plan Amendment. 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.

The Bay-Delta Plan Amendment is not self-implementing and does not automatically allocate responsibility for meeting its new flow requirements to 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.

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<sup>5</sup> "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 (December 12, 2018) p.17, fn. 14, available at [https://www.waterboards.ca.gov/plans\\_policies/docs/2018wqcp.pdf](https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf).)





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 impact on SFPUC water supply).

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. On March 26, 2019, SFPUC adopted Resolution No. 19-0057 to support 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.

### 6.1.2.2 Impacts of the Bay-Delta Plan Amendment on SFPUC Regional Water System Supplies

The adoption of the Bay-Delta Plan Amendment may significantly impact the supply available from the RWS. SFPUC recognizes that the Bay-Delta Plan Amendment has been adopted and that, given that it is now State law, it must be assumed that it will be fully implemented. SFPUC also acknowledges that the plan is not self-implementing and therefore does not automatically go into effect. As noted above, the SFPUC is currently pursuing an alternative voluntary agreement as well as a lawsuit which would limit implementation of the Bay-Delta Plan Amendment. With both of these processes occurring on an unknown timeline, SFPUC does not know at this time when the Bay-Delta Plan Amendment is likely to go into effect. As a result, it makes sense to conduct future supply modeling for a scenario that does not include implementation of the Bay-Delta Plan Amendment, as that represents a potential supply reliability scenario.

Because of the uncertainty surrounding implementation of the Bay-Delta Plan Amendment, SFPUC conducted a water service reliability assessment that included: (1) a scenario in which the Bay-Delta Plan Amendment is fully implemented in 2023, and (2) a scenario that considers the SFPUC system’s current situation without the Bay-Delta Plan Amendment. The two scenarios provide a bookend for the possible future scenarios regarding RWS supplies. However, SFPUC presented the scenario with the Bay-Delta Plan Amendment as the primary scenario in its 2020 UWMP.

Although the SWRCB has stated it intends to implement the Bay-Delta Plan Amendment on the Tuolumne River by the year 2022, given the current level of uncertainty, it is assumed for the purposes of SFPUC’s 2020 UWMP that the Bay-Delta Plan Amendment will be fully implemented starting in 2023.

### 6.1.2.3 SFPUC Dry Year Supply Projects

SFPUC historically has met demand in its service area in all year types from its watersheds, which consist of:

- Tuolumne River watershed
- Alameda Creek watershed
- San Mateo County watersheds





In general, 85 percent of the supply comes from the Tuolumne River through Hetch Hetchy Reservoir and the remaining 15 percent comes from the local watersheds through the San Antonio, Calaveras, Crystal Springs, Pilarcitos and San Andreas Reservoirs. The adopted WSIP retains this mix of water supply for all year types.

The WSIP includes 52 projects in the RWS. Forty-two of the WSIP regional projects have been completed, including: improvements at the Calaveras and Crystal Springs Reservoirs; construction of the Tesla disinfection facility and improvements at the Sunol Valley and Harry Tracy water treatment plants; Bay Division Region pipeline replacements, interties and crossovers; construction of a new Crystal Springs Bypass Tunnel; rehabilitation of Pulgas Balancing Reservoir; and, Peninsula Region pipeline replacements and valve lot improvements. The only major regional WSIP projects still under construction are the Regional GSR and the Alameda Creek Recapture Projects.

In order to achieve its target of meeting at least 80 percent of its customer demand during droughts with a system demand of 265 MGD, SFPUC must successfully implement the dry-year water supply projects included in the WSIP.

Furthermore, the permitting obligations for the Calaveras Dam Replacement Project and the Lower Crystal Springs Dam Improvements include a combined commitment of 12.8 MGD for in-stream flows on average. When this is reduced for an assumed Alameda Creek Recapture Project recovery of 9.3 MGD, the net loss of water supply is 3.5 MGD.

#### 6.1.2.4 SFPUC Alternative Water Supply Planning Program

The SFPUC has initiated, and is increasing and accelerating its efforts, to implement an Alternative Water Supply Planning Program 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 its 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 – SFPUC is considering this suite of diverse non-traditional supplies and leveraging regional partnerships to meet Retail and Wholesale Customer needs through 2045. Developing additional supplies through this program would reduce water supply shortfalls and reduce rationing associated with such shortfalls.

SFPUC has taken action to fund the study of potential additional water supply projects. Capital projects under consideration to develop additional water supplies include surface water storage expansion, recycled water expansion, water transfers, desalination, and potable reuse.<sup>6</sup>

The capital projects that are under consideration would be costly and are still in the early feasibility or conceptual planning stages. Because these water supply projects would take 10 to 30 years to implement, and because required environmental permitting negotiations may reduce the amount of water that can

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<sup>6</sup> List of potential water supply projects: Daly City Recycled Water Expansion (Regional, Normal and Dry-Year Supply), ACWD-USD Purified Water Partnership (Regional, Normal and Dry-Year Supply), Crystal Springs Purified Water (Regional, Normal and Dry-Year Supply), Los Vaqueros Reservoir Expansion (Regional, Dry-Year Supply), Bay Area Brackish Water Desalination (Regional, Normal and Dry-Year Supply), Calaveras Reservoir Expansion (Regional, Dry-Year Supply), Groundwater Banking, and Inter-Basin Collaborations.



be developed, the yield from these projects are not currently incorporated into SFPUC's supply projections. State and Federal grants and other financing opportunities would be pursued for eligible projects, to the extent feasible, to offset costs borne by ratepayers.

If all the projects identified through the current planning process can be implemented, there would still be a supply shortfall to meet projected needs. Furthermore, each of the supply options being considered has its own inherent challenges and uncertainties that may affect SFPUC's ability to implement it.

Given the limited availability of water supply alternatives - unless the supply risks are significantly reduced or the needs change significantly - SFPUC will continue to plan, develop and implement all project opportunities that can help bridge the anticipated water supply gaps during droughts. In 2019, SFPUC completed a survey among water and wastewater agencies within the service area to identify additional opportunities for purified water. Such opportunities remain limited, but SFPUC continues to pursue all possibilities.

### 6.1.2.5 Bay Area Water Conservation and Supply Agency

The City is a member of BAWSCA. The following sections discuss BAWSCA's Long-Term Reliable Water Supply Strategy and conservation activities.

#### 6.1.2.5.1 Long-Term Reliable Water Supply Strategy

BAWSCA's Long-Term Reliable Water Supply Strategy (Strategy), completed in February 2015, quantified the water supply reliability needs of the BAWSCA member agencies through 2040, identified the water supply management projects and/or programs (projects) that could be developed to meet those needs, and prepared an implementation plan for the Strategy's recommendations.

When the 2015 Demand Study concluded it was determined that while there is no longer a regional normal year supply shortfall, there was a regional drought year supply shortfall of up to 43 MGD. In addition, key findings from the Strategy's project evaluation analysis included the following:

- Water transfers represent a high priority element of the Strategy
- Desalination potentially provides substantial yield, but its high effective costs and intensive permitting requirements make it a less attractive drought year supply alternative
- Other potential regional projects provide tangible, though limited, benefit in reducing dry-year shortfalls given the small average yields in drought years

Since 2015, BAWSCA has completed a comprehensive update of demand projections and engaged in significant efforts to improve regional reliability and reduce the dry-year water supply shortfall.

- **Water Transfers.** BAWSCA successfully facilitated two transfers of portions of ISG between BAWSCA agencies in 2017 and 2018. Such transfers benefit all BAWSCA agencies by maximizing use of existing supplies. BAWSCA is currently working on an amendment to the Water Supply Agreement between SFPUC and BAWSCA agencies to establish a mechanism by which member agencies that have an ISG may participate in expedited transfers of a portion of ISG and a portion of a Minimum Annual Purchase Requirement. In 2019, BAWSCA participated in a pilot water transfer that, while ultimately unsuccessful, surfaced important lessons learned and produced interagency agreements that will serve as a foundation for future transfers. BAWSCA is currently engaged in the Bay Area Regional Reliability



Partnership to identify opportunities to move water across the region as efficiently as possible, particularly during times of drought and emergencies.

- **Regional Projects.** Since 2015, BAWSCA has coordinated with local and State agencies on regional projects with potential dry-year water supply benefits for BAWSCA's agencies. These efforts include storage projects, indirect/direct water reuse projects, and studies to evaluate the capacity and potential for various conveyance systems to bring new supplies to the region.

BAWSCA continues to implement the Strategy recommendations in coordination with BAWSCA member agencies. Strategy implementation will be adaptively managed to account for changing conditions and to ensure that the goals of the Strategy are met in an efficient and cost-effective manner. On an annual basis, BAWSCA will reevaluate Strategy recommendations and results in conjunction with development of the BAWSCA's FY 2021/22 Work Plan. In this way, actions can be modified to accommodate changing conditions and new developments.

### *6.1.2.5.2 Making Conservation a Way of Life Strategic Plan*

Following the 2014-2016 drought, the State developed the "Making Water Conservation a California Way of Life" framework to address the long-term water use efficiency requirements called for in executive orders issued by Governor Brown. In May of 2018, AB 1668 and SB 606 went into effect, building upon the executive orders implementing new urban water use objectives for urban retail water suppliers.

BAWSCA led its member agencies in a multi-year effort to develop and implement a strategy to meet these new legislative requirements. BAWSCA's Making Conservation a Way of Life Strategic Plan (Strategic Plan) provided a detailed roadmap for member agencies to improve water efficiency.

### *6.1.2.5.3 BAWSCA Conservation Programs*

BAWSCA manages a Regional Water Conservation Program comprised of several programs and initiatives that support and augment member agencies' and customers' efforts to use water more efficiently. These efforts extend limited water supplies that are available to meet both current and future water needs; increase drought reliability of the existing water system; and save money for both the member agencies and their customers.

The implementation of the Regional Water Conservation Program builds upon both the Water Conservation Implementation Plan (completed in September 2009) and the Regional Demand and Conservation Projections Project (completed in June of 2020). These efforts include both Core Programs (implemented regionally throughout the BAWSCA service area) and Subscription Programs (funded by individual member agencies that elect to participate and implement them within their respective service areas).

Each fiscal year, BAWSCA prepares an Annual Water Conservation Report that documents how all of BAWSCA's 26 member agencies have benefitted from the Core Conservation Programs. Additionally, the report highlights how all 26 member agencies participate in one or more of the Subscription Programs offered by BAWSCA, such as rebates, water loss management and large landscape audits.

### *6.1.2.6 SFPUC Supply Allocations*

The Water Supply Agreement between the SFPUC and wholesale customers includes a WSAP (also known as the Tier One Plan) that describes the method for allocating water from the RWS between Retail and Wholesale Customers during system-wide shortages of 20 percent or less. The Wholesale Customers' share is apportioned among the individual Wholesale Customers based on a separate methodology adopted by



the Wholesale Customers, known as the Tier Two Plan. Discussion of the Tier One and Tier Two drought allocation plans are provided below.

**6.1.2.6.1 Tier One Drought Allocations**

In July 2009, San Francisco and its Wholesale Customers in Alameda County, Santa Clara County, and San Mateo County (Wholesale Customers) adopted the Water Supply Agreement, which includes a WSAP that describes the method for allocating water from the RWS between Retail and Wholesale Customers during system-wide shortages of 20 percent or less. The WSAP, also known as the Tier One Plan, was amended in the 2018 Amended and Restated Water Supply Agreement.

SFPUC allocates water under the Tier One Plan when it determines that the projected available water supply is up to 20 percent less than projected system-wide water purchases. Table 6-1 shows the SFPUC (i.e., Retail Customers) share and the Wholesale Customers’ share of the annual water supply available during shortages depending on the level of system-wide reduction in water use that is required. The Wholesale Customers’ share will be apportioned among the individual Wholesale Customers based on a separate methodology adopted by the Wholesale Customers, known as the Tier Two Plan, discussed further below.

Level of System-Wide Reduction in Water Use Required	Share of Available Water	
	Retail Customers	Wholesale Customers
5% or less	35.5%	64.5%
6% through 10%	36.0%	64.0%
11% through 15%	37.0%	63.0%
16% through 20%	37.5%	62.5%

*Source: City of San Bruno 2020 UWMP, November 2021. Table 7-1.*

The Tier One Plan allows for voluntary transfers of shortage allocations between SFPUC and any Wholesale Customer as well as between Wholesale Customers themselves. In addition, water “banked” by a Wholesale Customer, through reductions in usage greater than required, may also be transferred.

As amended in 2018, the Tier One Plan requires Retail Customers to conserve a minimum of 5 percent during droughts. If Retail Customer demands are lower than the Retail Customer allocation (resulting in a “positive allocation” to Retail) then the excess percentage would be re-allocated to the Wholesale Customers’ share. The additional water conserved by Retail Customers up to the minimum 5 percent level is deemed to remain in storage for allocation in future successive dry years.

The Tier One Plan applies only when SFPUC determines that a system-wide water shortage exists and issues a declaration of a water shortage emergency under California Water Code Section 350. Separate from a declaration of a water shortage emergency, SFPUC may opt to request voluntary cutbacks from its Retail and Wholesale Customers to achieve necessary water use reductions during drought periods.

The Tier One Plan will expire at the end of the term of the Water Supply Agreement in 2034, unless mutually extended by San Francisco and the Wholesale Customers.



### 6.1.2.6.2 Tier Two Drought Allocations

The Wholesale Customers have negotiated and adopted the Tier Two Plan, referenced above, which allocates the collective Wholesale Customers share from the Tier One Plan among each of the 26 Wholesale Customers. These Tier Two allocations are based on a formula that takes into account multiple factors for each Wholesale Customer including:

- Individual Supply Guarantee
- Seasonal use of all available water supplies
- Residential per capita use

The water made available to the Wholesale Customers collectively will be allocated among them in proportion to each Wholesale Customer's Allocation Basis, expressed in MGD, which in turn is the weighted average of two components. The first component is the Wholesale Customer's Individual Supply Guarantee, as stated in the Water Supply Agreement, and is fixed. The second component, the Base/Seasonal Component, is variable and is calculated using the monthly water use for three consecutive years prior to the onset of the drought for each of the Wholesale Customers for all available water supplies. The second component is accorded twice the weight of the first, fixed component in calculating the Allocation Basis. Minor adjustments to the Allocation Basis are then made to ensure a minimum cutback level, a maximum cutback level, and a sufficient supply for certain Wholesale Customers.

The Allocation Basis is used in a fraction, as numerator, over the sum of all Wholesale Customers' Allocation Bases to determine each wholesale customer's Allocation Factor. The final shortage allocation for each Wholesale Customer is determined by multiplying the amount of water available to the Wholesale Customers' collectively under the Tier One Plan, by the Wholesale Customer's Allocation Factor.

The Tier Two Plan requires that the Allocation Factors be calculated by BAWSCA each year in preparation for a potential water shortage emergency. As the Wholesale Customers change their water use characteristics (e.g., increases or decreases in SFPUC purchases and use of other water sources, changes in monthly water use patterns, or changes in residential per capita water use), the Allocation Factor for each Wholesale Customer will also change. However, for long-term planning purposes, each Wholesale Customer shall use as its Allocation Factor, the value identified in the Tier Two Plan when adopted.

The Tier Two Plan, which initially expired in 2018, has been extended by the BAWSCA Board of Directors every year since for one additional calendar year. In November 2021, the BAWSCA Board voted to extend the Tier Two Plan through the end of 2022.

It should be noted that with the implementation of the Bay-Delta Plan Amendment, the estimated water shortages for the RWS in a multiple year drought period would be greater than 20 percent and the Tier Two Plan would not be applicable.

### 6.1.2.6.3 Allocations for Supply Shortages Greater than 20 Percent

For RWS shortages in excess of 20 percent, San Francisco shall: (a) follow the Tier One Plan allocations up to the 20 percent reduction, (b) meet and discuss with the Wholesale Customers how to implement incremental reductions above 20 percent, and (c) make a final determination of allocations above the 20 percent reduction. After SFPUC has made the final allocation decision, the Wholesale Customers shall be free to challenge the allocation on any applicable legal or equitable basis.



For purposes of the 2020 UWMPs, for RWS shortages in excess of 20 percent, the allocations among the Wholesale Customers are assumed to be equivalent among them and to equal the drought cutback to each Wholesale Customer by SFPUC.

### 6.1.2.7 Projected Supplies from SFPUC Regional Water System

SFPUC has a Level of Service objective of meeting average annual water demand of 265 MGD from the SFPUC watersheds for retail and wholesale customers during non-drought years, as well as a contractual obligation to supply 184 MGD to the wholesale customers. These projected supplies are summarized in Table 6-2.

Customer Type	2020	2025	2030	2035	2040	2045
SFPUC Retail Supply, MGD	81	81	81	81	81	81
SFPUC Wholesale Supply, MGD	184	184	184	184	184	184
<b>Total, MGD</b>	<b>265</b>	<b>265</b>	<b>265</b>	<b>265</b>	<b>265</b>	<b>265</b>

*Source: City of San Bruno 2020 UWMP, November 2021. Table 7-2.*

For SFPUC’s water supply reliability evaluation in its 2020 UWMP, it is assumed that demand is equivalent to the sum of the projected retail demands on the Regional Water System and wholesale customer purchase request projections provided to SFPUC by BAWSCA in January 2021. These projected water demands are summarized in Table 6-3.

Customer Type	2020	2025	2030	2035	2040	2045
SFPUC Retail Customers, MGD	66.5	67.2	67.5	68.6	70.5	73.7
SFPUC Wholesale Customers, MGD	132.1	146.0	147.9	151.9	156.3	162.8
<b>Total, MGD</b>	<b>198.6</b>	<b>213.2</b>	<b>215.4</b>	<b>220.5</b>	<b>226.8</b>	<b>236.5</b>

*Source: City of San Bruno 2020 UWMP, November 2021. Table 7-3.*

The City’s water supply availability from the RWS under normal (average), single dry and multiple dry year conditions is described in Tables 6-4 and 6-5. Because the RWS water demands vary over the period evaluated, in addition to supply conditions (with and without the Bay-Delta Plan Amendment), the estimated availability of RWS supplies varies by year and by assumed conditions.

This variation in the City’s SFPUC supply availability is shown in Table 6-4 with the Bay-Delta Plan Amendment and in Table 6-5 without the Bay-Delta Plan Amendment. As shown in Table 6-4, with the Bay-Delta Plan Amendment, SFPUC supply availability is reduced to as low as 46 percent of projected purchases in some dry years. As shown in Table 6-5, without the Bay-Delta Plan Amendment, supply availability is projected to be at least 81 percent of projected purchases.





**Table 6-4. Projected SFPUC Supply Availability for the City of San Bruno in Years 2025 to 2045 with Bay-Delta Plan Amendment**

Year Type	2025	2030	2035	2040	2045
Average Year	100%	100%	100%	100%	100%
Single Dry Year	64%	64%	63%	63%	55%
Consecutive 1st Dry Year	64%	64%	63%	63%	55%
Consecutive 2nd Dry Year	55%	55%	54%	54%	55%
Consecutive 3rd Dry Year	55%	55%	54%	54%	55%
Consecutive 4th Dry Year	55%	55%	54%	48%	46%
Consecutive 5th Dry Year	55%	55%	50%	48%	46%

Source: City of San Bruno 2020 UWMP, November 2021. Table 7-4.

**Table 6-5. Projected SFPUC Supply Availability for the City of San Bruno in Years 2025 to 2045 without Bay-Delta Plan Amendment**

Year Type	2025	2030	2035	2040	2045
Average Year	100%	100%	100%	100%	100%
Single Dry Year	100%	100%	100%	100%	100%
Consecutive 1st Dry Year	100%	100%	100%	100%	100%
Consecutive 2nd Dry Year	100%	100%	100%	100%	100%
Consecutive 3rd Dry Year	100%	100%	100%	100%	100%
Consecutive 4th Dry Year	100%	100%	100%	100%	81%
Consecutive 5th Dry Year	100%	100%	100%	100%	81%

Source: City of San Bruno 2020 UWMP, November 2021. Table 7-5.

## 6.2 Reliability of NCCWD Supplies

Because water purchased by the City from NCCWD originates from the RWS, the City’s purchases of NCCWD supplies are subject to the same SFPUC reliability constraints as the City’s supplies purchased directly from SFPUC. Therefore, it is assumed that supply reliability from the NCCWD will be the same as that presented in Tables 6-4 and 6-5.

## 6.3 Reliability of City’s Groundwater Supplies

The South Westside Basin has received sufficient recharge such that it has maintained relatively stable groundwater levels in recent years. Because the availability of groundwater is more dependent on long-term climate than year-to-year hydrology, and because the Regional GSR Project has been implemented to increase recharge of the South Westside Basin in wet and normal years, the City’s groundwater supplies are not subject to reductions in dry years so long as the City does not exceed the estimated sustainable groundwater yield of 2.1 MGD.

The City is concerned about the effect of saltwater intrusion on the quality of its groundwater supplies. To date however, regional groundwater monitoring has detected no indication that saltwater intrusion has



occurred in the City. Therefore, it is assumed that the City will be able to produce 2.1 MGD of groundwater from its wells during average, single dry, and multiple dry year droughts.

The estimated availability of the City’s groundwater supplies is summarized in Table 6-6.

Year Type	Available Groundwater Supply
Average Year	0% <sup>(b)</sup>
Single Dry Year	100%
Consecutive 1st Dry Year	100%
Consecutive 2nd Dry Year	100%
Consecutive 3rd Dry Year	100%
Consecutive 4th Dry Year	100%
Consecutive 5th Dry Year	100%

(a) The City’s estimated sustainable groundwater yield is equal to 2.1 MGD.  
 (b) It is assumed that the City will not operate its groundwater wells during an average year, and this supply will be replaced with in-lieu surface water from SFPUC as part of the Regional GSR Project.

### 6.4 Summary of Water Supply in Normal, Single Dry, and Multiple Dry Years

The City’s projected supply for normal, single dry, and multiple dry years (five-year droughts) are quantified below in Table 6-7. It is assumed for the purposes of this evaluation that the Bay-Delta Plan Amendment will be implemented to provide a more conservative assessment.

Year Type, MGD	2025	2030	2035	2040	2045
Average Year	5.39	5.37	5.35	5.35	5.36
Single Dry Year	4.20	4.18	4.16	4.16	3.88
Consecutive 1st Dry Year	4.20	4.18	4.16	4.16	3.88
Consecutive 2nd Dry Year	3.90	3.89	3.87	3.87	3.88
Consecutive 3rd Dry Year	3.90	3.89	3.87	3.87	3.88
Consecutive 4th Dry Year	3.90	3.89	3.87	3.66	3.61
Consecutive 5th Dry Year	3.90	3.89	3.73	3.66	3.61

*Source: City of San Bruno 2020 UWMP, November 2021. Table 7-12.*





## **7.0 DETERMINATION OF WATER SUPPLY SUFFICIENCY BASED ON THE REQUIREMENTS OF SB 610**

*10910(c)(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*

Pursuant to Water Code Section 10910(c)(4) and based on the technical analyses described in this WSA, the total projected water supplies determined to be available for the Proposed Project during normal, single dry, and multiple dry years during a 20-year projection will meet the projected water demand associated with the Proposed Project, in addition to existing and planned future uses.

Table 7-1 summarizes the projected availability of the City's existing and planned future water supplies and the City's projected water demands in normal, single dry, and multiple dry years through 2045. There is sufficient supply to meet projected demands in normal years. However, the City's water supplies are not adequate to meet projected demands in single dry years and multiple dry years. Supply shortfalls, ranging from 5 to 19 percent in the first year of the five-year dry period to 2 to 24 percent in the fifth year of the five-year dry period, are projected. This shortfall is primarily due to significant cutbacks in the City's supply from SFPUC which is significantly reduced in dry years due to the Bay-Delta Plan Amendment.

As discussed in Section 4.3, projected demands were not reduced in dry years to remain conservative. In years with a supply shortfall, the City can implement its WSCP to reduce demands to the level of available supply. The WSCP stages required to achieve the necessary demand reductions range from Stage 1 to Stage 3.

Actions that the SFPUC is taking in response to a potential water supply shortage are expected to mitigate the water supply shortage by some, as yet unquantified, amount. Therefore, the water supply and demand summary provided in Table 7-1 should be considered as the worst-case water supply conditions for the City (i.e., full implementation of the Bay-Delta Plan Amendment without mitigating actions).

It should be noted that without the Bay-Delta Plan Amendment, supply shortfalls would be nearly eliminated. The only anticipated supply shortage would be less than 1 percent in the fourth and fifth dry years of the five-year dry period in 2045.



**Table 7-1. Summary of Water Demand Versus Supply During Hydrologic Normal, Single Dry, and Multiple Dry Years**

Year Type	Supply and Demand Comparison, mgd				
	2025	2030	2035	2040	2045
<b>Normal Year</b>					
Available Potable Water Supply <sup>(a)</sup>	5.39	5.37	5.35	5.35	5.36
Total Water Demand <sup>(b)</sup>	3.53	3.95	4.37	4.78	4.78
Surplus (Deficit)	1.86	1.42	0.98	0.57	0.58
Percent Shortfall	--	--	--	--	--
<b>Single Dry Year</b>					
Available Potable Water Supply <sup>(a)</sup>	4.20	4.18	4.16	4.16	3.88
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.67	0.23	(0.21)	(0.62)	(0.90)
Percent Shortfall	--	--	5%	13%	19%
<b>Multiple Dry Year 1</b>					
Available Potable Water Supply <sup>(a)</sup>	4.20	4.18	4.16	4.16	3.88
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.67	0.23	(0.21)	(0.62)	(0.90)
Percent Shortfall	--	--	5%	13%	19%
<b>Multiple Dry Year 2</b>					
Available Potable Water Supply <sup>(a)</sup>	3.90	3.89	3.87	3.87	3.88
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.37	(0.06)	(0.50)	(0.91)	(0.90)
Percent Shortfall	--	2%	11%	19%	19%
<b>Multiple Dry Year 3</b>					
Available Potable Water Supply <sup>(a)</sup>	3.90	3.89	3.87	3.87	3.88
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.37	(0.06)	(0.50)	(0.91)	(0.90)
Percent Shortfall	--	2%	11%	19%	19%
<b>Multiple Dry Year 4</b>					
Available Potable Water Supply <sup>(a)</sup>	3.90	3.89	3.87	3.66	3.61
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.37	(0.06)	(0.50)	(1.12)	(1.17)
Percent Shortfall	--	2%	11%	23%	24%
<b>Multiple Dry Year 5</b>					
Available Potable Water Supply <sup>(a)</sup>	3.90	3.89	3.73	3.66	3.61
<b>Total Water Demand<sup>(b)</sup></b>	<b>3.53</b>	<b>3.95</b>	<b>4.37</b>	<b>4.78</b>	<b>4.78</b>
Surplus (Deficit)	0.37	(0.06)	(0.64)	(1.12)	(1.17)
Percent Shortfall	--	2%	15%	23%	24%
<p>(a) Refer to Table 6-7. Totals assume implementation of the Bay-Delta Plan Amendment.</p> <p>(b) Projected water demand is from Table 4-2. This WSA conservatively assumes no reduction in water demand in dry years, consistent with the City of San Bruno's 2020 UWMP.</p>					



## **8.0 WATER SUPPLY ASSESSMENT APPROVAL PROCESS**

*10910 (g)(1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.*

*10911 (b) The city or county shall include the water supply assessment provided pursuant to Section 10910, and any information provided pursuant to subdivision (a), in any environmental document prepared for the project pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.*

This WSA must be approved by the San Bruno City Council and included in the IS/MND being prepared for the Proposed Project.



## 9.0 REFERENCES

Association of Bay Area Governments. March 2022. Final Regional Housing Needs Allocation Plan: San Francisco Bay Area 2023-2031.

West Yost. November 2021. City of San Bruno 2020 Urban Water Management Plan.

West Yost. December 2021. City of San Bruno Water System Master Plan.