

WATER SUPPLY ASSESSMENT

APPENDIX I

to the
Alexandria Center for Life Science Project Draft EIR



Water Supply Assessment for the Alexandria District for Science and Technology

**Mid-Peninsula District
California Water Service**

**September 2022
EKI C00112.00**

Water Supply Assessment

Alexandria District for Science and Technology
Mid-Peninsula District, California Water Service

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Water Supply Assessment

Alexandria District for Science and Technology
Mid-Peninsula District, California Water Service

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CALIFORNIA WATER SERVICE

Water Resource Sustainability Department 1720 North First Street
San Jose, CA 95112

September 6th, 2022

Patrick Dillmann
Assistant Vice President - Real Estate Development & Construction
Alexandria Real Estate Equities, Inc.
1700 Owens Street Suite 590
San Francisco, CA 94158

Dear Mr. Dillmann,

This letter serves as the California Water Service Company's (Cal Water) formal approval of the Water Supply Assessment (WSA) for the Alexandria District for Science and Technology Project in San Carlos, California. This approval is contingent on the developer's compliance with any conditions set forth in the WSA by Cal Water.

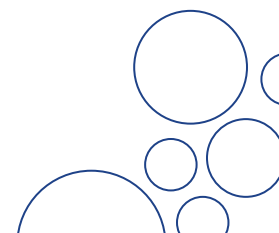
Authority for this approval is pursuant to Cal Water's "Resolution to Approve Water Supply Assessment and Related Documents for New Developments" dated October 27, 2021.

Should you have any questions, please contact Michael Bolzowski at mbolzowski@calwater.com or (408) 367-8338.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Jenkins", is written over a light blue circular background.

Ken Jenkins
Chief Water Resource Sustainability Officer



1 INTRODUCTION

Included herein is a Senate Bill 610-compliant water supply assessment (WSA) in support of the proposed Alexandria District for Science and Technology development (“proposed Project”; **Figure 1**). The proposed Project is located southwest of the intersection of Commercial Street and Industrial Road in the City of San Carlos, California. The proposed Project includes six multi-story office/laboratory buildings, one single-story building, two parking structures, and associated irrigated landscaping (Alexandria, 2022a; Brookwater, 2022). The proposed Project is located within the California Water Service Company (Cal Water) Mid-Peninsula District service area and Cal Water will be the water service provider for the proposed Project. The Mid-Peninsula District is comprised of two public water systems (i.e., the San Carlos and San Mateo systems), which are operated jointly and share the same water supply source.

The information provided in this WSA is consistent with California Water Code (CWC or Water Code) §10910-10912 requirements and the California Department of Water Resources’ (DWR’s) *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001: To Assist Water Suppliers, Cities, and Counties in Integrating Water and Land Use Planning*, dated 8 October 2003. The text of specific sub-sections of the Water Code is included in indented and italicized font at the beginning of specific sections of this WSA. The information presented in those respective sections, and the associated tables and figures, respond directly to Water Code requirements.

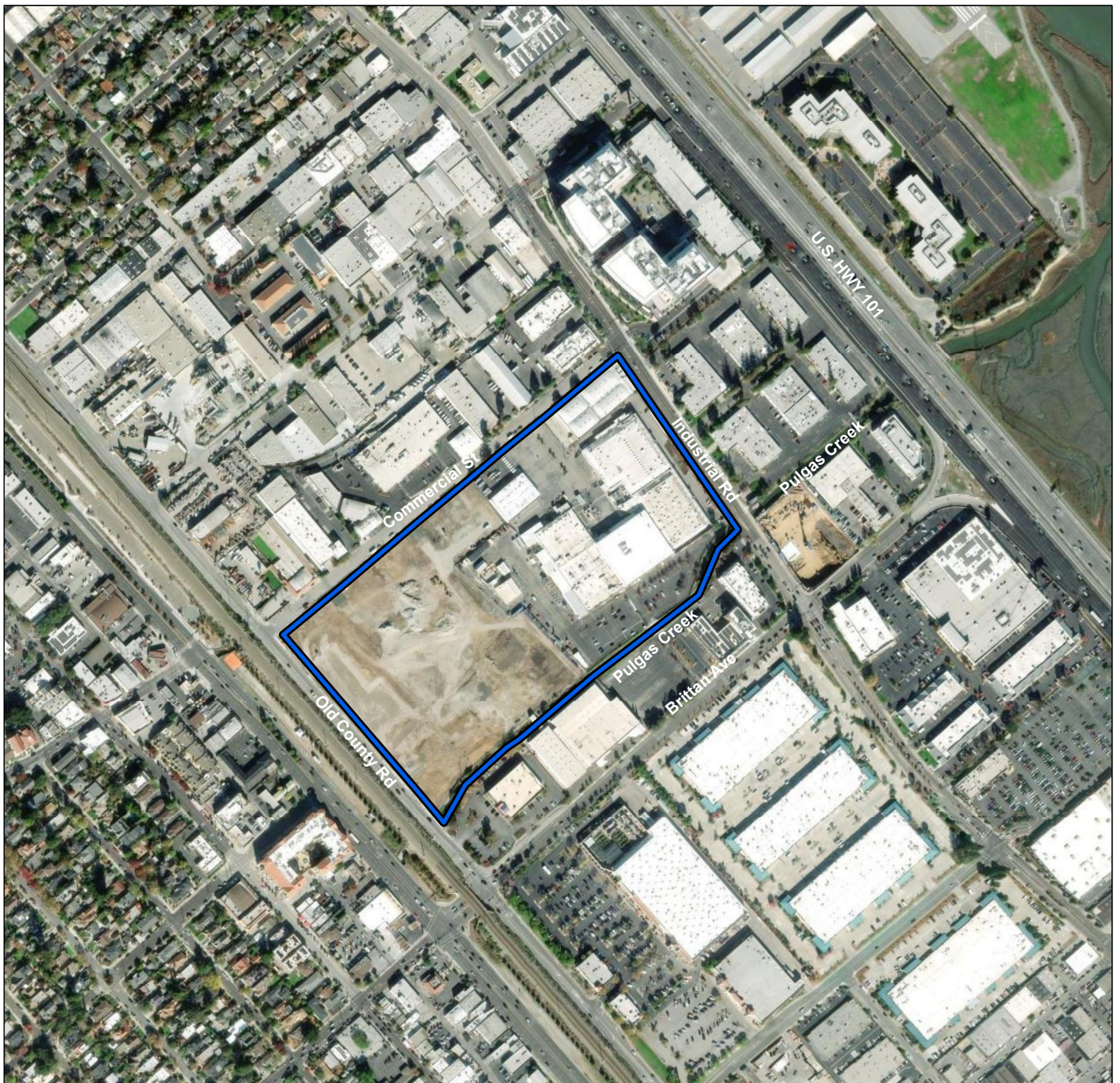
The purpose of this WSA is to evaluate whether Cal Water has sufficient water supply to meet the current and planned water demands within its Mid-Peninsula District service area, including the demands associated with the proposed Project, during normal and dry hydrologic years over a 20-year time horizon. Given that the Mid-Peninsula District shares its contractual allocation for its primary supply source (i.e., the City and County of San Francisco’s Regional Water System [RWS]) with Cal Water’s Bear Gulch and South San Francisco Districts (referred to herein as the “three Peninsula Districts”, **Figure 2**), the collective projected supplies and demands for all three Peninsula Districts are considered in this WSA. More specifically, this WSA includes:

- A summary of the WSA requirements articulated in Water Code §10910-10912 and a description of how they apply to the proposed Project;
- A description and analysis of the current and projected future water demands of the proposed Project through the year 2045;
- A description and analysis of the historical and current water demands for the Mid-Peninsula District, and projected future water demands for the three Peninsula Districts’ service areas through the year 2045;
- A description and analysis of the current and projected future water supplies for the three Peninsula Districts’ service areas through the year 2045; and


- A comparison of the water supplies and demands for the three Peninsula Districts' service areas, including the projected water demands associated with the proposed Project.

The information contained in this WSA is based primarily on Cal Water's Mid-Peninsula, South San Francisco, and Bear Gulch Districts' 2020 Urban Water Management Plans (UWMPs), except where updated with relevant water demand and supply reliability and other information provided by Cal Water, DWR, the San Francisco Public Utilities Commission (SFPUC), and the Bay Area Water Supply and Conservation Agency (BAWSCA). The findings of this WSA are contingent upon the implementation of conservation/demand management measures to offset any net new demands from qualifying projects in specified Cal Water's districts under Cal Water's Development Offset Program. This program is discussed further in Section 4.1.

This WSA concludes that, through supply augmentation and implementation of demand management measures equal to the Project's estimated net new demands consistent with Cal Water's Development Offset Program, the proposed Project will not affect water supply reliability within the Mid-Peninsula District. Based on currently available information and conservative estimates of projected demand, Cal Water expects to be able to meet all future demands within its existing Mid-Peninsula District service area (as well as the South San Francisco and Bear Gulch Districts), inclusive of the proposed Project in normal hydrologic years. The shortfalls that are currently projected during dry years will be addressed through planned implementation of the Mid-Peninsula District Water Shortage Contingency Plan (WSCP). In addition, as described herein and in Cal Water's 2020 UWMP, BAWSCA, Cal Water, and SFPUC are pursuing the development of additional water supplies to improve the RWS and Mid-Peninsula District supply reliability.



Legend

 Proposed Project

Notes

1. All locations are approximate.

Sources

1. Basemap is ESRI's ArcGIS Online world aerial map, obtained 6 September 2022.
2. Project site location is per information provided by Cal Water via email on 17 September 2020.



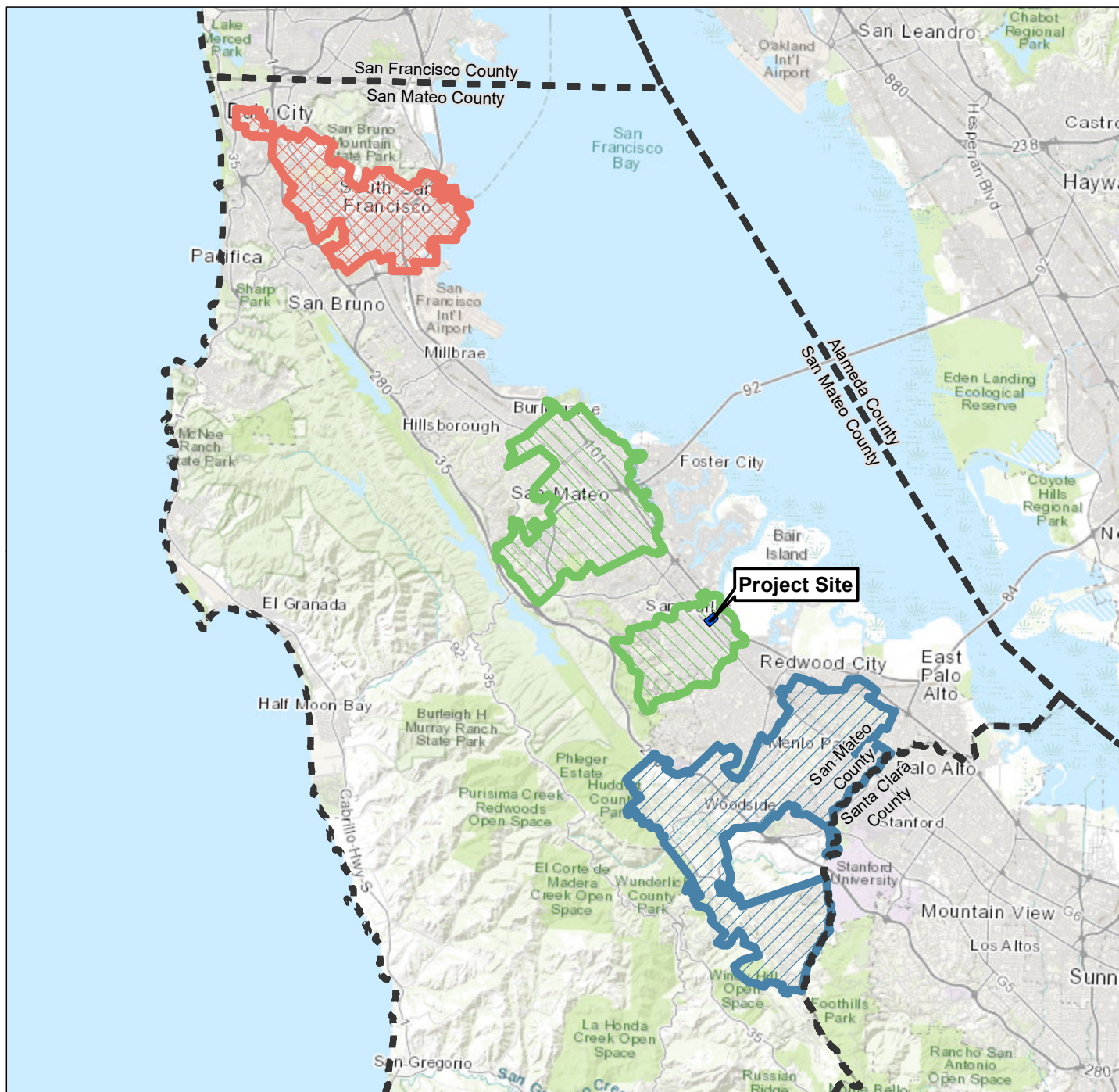
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Project Location

Alexandria District for Science and Technology
San Carlos, CA
September 2022
EKI C00112.00

eki environment
& water

Figure 1



Legend

	Proposed Project		Bear Gulch District
	County Boundary		Mid-Peninsula District
			South San Francisco District

Abbreviations

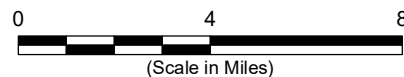
Cal Water = California Water Service

Notes

1. All locations are approximate.

Sources

1. Basemap is ESRI's ArcGIS Online world aerial map, obtained 6 September 2022.
2. Boundary data for Cal Water districts' service areas received from Cal Water on 16 October 2017.



Cal Water's Three Peninsula Districts

Alexandria District for Science and Technology
 San Carlos, CA
 September 2022
 EKI C00112.00



Figure 2

2 GENERAL REQUIREMENTS FOR THE PREPARATION OF A WATER SUPPLY ASSESSMENT

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

2.1 Applicability of Senate Bill 610 to the Project

Water Code Section 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.

Water Code Section 10912

For the purposes of this part, the following terms have the following meanings:

(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.*

The approximately 25.3-acre proposed Project Site is located generally south of Commercial Street, west of Industrial Road, east of Old County Road, and north of Pulgas Creek in the City of San Carlos, California (**Figure 1**) (City of San Carlos, 2021). The proposed Project will consist of six multi-story office/laboratory buildings and one single-story building totaling 1,734,532 square feet (SF) of space, plus two parking structures and associated irrigated landscaping (Alexandria, 2022a; Brookwater, 2022). The proposed Project exceeds the threshold for a “project” requiring a WSA pursuant to SB 610 (Water Code §10910(a) and 10912(a)(3)).

2.2 Responsibility for Preparation of the Water Supply Assessment

Water Code Section 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 in Section 10912, that

may supply water for the project. If the city or county is not able to identify any public water system that may supply water for the project, the city or county shall prepare the water assessment required by this part after consulting with any entity serving domestic water supplies whose service area includes the project site, the local agency formation commission, and any public water system adjacent to the project site.

The proposed Project is located within the Cal Water Mid-Peninsula District service area and the water for the proposed Project will be supplied by Cal Water. Therefore, in accordance with Water Code §10910(b), Cal Water is the entity responsible for preparation and adoption of a WSA for the proposed Project.

2.3 Components of a Water Supply Assessment

Water Code Section 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.

As listed above in Water Code §10910(c)(4), the primary purpose of a WSA is to evaluate whether sufficient water supply is available to meet all future demands within the water supplier's service area, including those associated with the proposed Project, during normal and dry hydrologic years for a 20-year planning horizon. Given that the Mid-Peninsula District shares its contractual allocation for its supply source (i.e., the City and County of San Francisco's RWS) with Cal Water's three Peninsula Districts (**Figure 2**), the collective projected supplies and demands for all three Peninsula Districts are considered in this WSA. More specifically, this WSA includes:

- A summary of the WSA requirements articulated in Water Code §10910-10912 and a description of how they apply to the proposed Project;
- A description and analysis of the current and projected future water demands of the proposed Project through the year 2045;
- A description and analysis of the historical and current water demands for the Mid-Peninsula District, and projected future water demands for the three Peninsula Districts' service areas through the year 2045;
- A description and analysis of the current and projected future water supplies for the three Peninsula Districts' service areas through the year 2045; and
- A comparison of the water supplies and demands for the three Peninsula Districts' service areas, including the projected water demands associated with the proposed Project.

3 PROJECT DESCRIPTION

The proposed Project is located southwest of the intersection of Commercial Street and Industrial Road in the City of San Carlos, California. The proposed Project is bounded on three sides by Commercial Street, Industrial Street, and Old County Road. The approximately 25.3-acre proposed Project's development plan is described as a "biotech campus," and includes three five-story buildings, one six-story building, two seven-story buildings, and one single-story building totaling 1,734,532 square feet (SF) of space, plus two parking structures and associated irrigated landscaping (Alexandria, 2022a). The multi-story buildings will include both office and laboratory space, and will be leased to biotech companies (Keown, 2019). The single-story building will house a childcare center and one of the two parking structures will include a fitness center and bike shop totaling 9,150 AF of space.

Per the preliminary construction schedule provided by Alexandria Real Estate Equities, Inc. (Project Proponent), construction will be phased over 8 years, from 2022 through 2029. It is anticipated that the first phase, consisting of Buildings 5 and 6 and one parking garage will be completed in 2024, and the remaining phases will be completed in 2029 (Alexandria, 2022b).

As shown on **Figure 1**, the proposed Project Site is currently developed for office and industrial uses. Historical water use at the site ranged between 1.1 to 3.8 acre feet per year (AFY) between 2017 and 2021, and averaged 1.7 AFY (Cal Water, 2021d; 2022b). The proposed Project is located within the Cal Water Mid-Peninsula District service area and potable water service to the proposed Project will be provided by Cal Water (**Figure 2**).

4 PROJECT WATER DEMAND

The City of San Carlos has adopted green building standards and water efficient landscaping ordinances consistent with previous versions of the CalGreen building standards and the California Model Water Efficient Landscape Ordinance (MWELO). As part of state requirements, all new developments must comply with these efficiency standards. As such, the proposed Project development is expected to include a number of water-efficient features, including, but not limited to:

- Use of low-flow lavatory faucets, kitchen faucets, toilets, and urinals in accordance with CalGreen Code; and
- Inclusion of low-water use landscaping and high-efficiency irrigation systems to minimize outdoor water use in accordance with MWELO.

As described below, average annual water demand for the proposed Project is based on the Cal Water WSA Water Factor Tool, which was developed based on 2016-2018 water use data for the Mid-Peninsula District (Cal Water, 2019). **Table 1** includes a summary of the water demand projections associated with the proposed land uses, in five-year increments through 2045. This table reflects the proposed Project's construction phasing, and assumes that demand for Building 5, Building 6, and Parking Garage 1 will be realized by 2025 and full project buildout will be achieved by 2030 (Alexandria, 2022b).

4.1 Cal Water's Development Offset Program

In July 2021, Cal Water began development of a Development Offset Program (Program) for its three Peninsula Districts, which share the same SFPUC supply allocation. The purpose of the Program is to ensure that overall customer demand for water does not exceed available current or future supply under a range of hydrologic conditions, and to ensure the availability of water for residential, commercial, and other purposes for future water use in the three Peninsula Districts (Cal Water, 2022a).

As approved by the California Public Utilities Commission (CPUC), the Program will require any new residential, commercial, or industrial development within any of the three Peninsula Districts that is projected to increase demand by more than 50 AFY to pay a special facilities fee, referred to as a developer offset fee, consisting of a fee of \$15,400 per acre-foot of net demand increase. The net demand increase is defined as the expected total potable water use for the development once it is completed, minus the average annual existing potable water use on the property over the previous five years. The offset amount for the Project is identified in Section 4.5. Cal Water will verify compliance with this Program (i.e., ensure that all payments for offsets are completed) prior to establishing a water service connection. As noted above, the findings of this WSA are contingent upon compliance with this Program.

4.2 Commercial Water Use

The average annual water demand for the proposed Project is based on the Cal Water WSA Water Factor Tool, which was developed based on 2016-2018 water use data for the Mid-Peninsula District (Cal Water, 2019). **Table 1** provides a summary of the land uses, unit demand factors, and respective water demand associated with each land use. The unit demand factor for indoor non-residential uses as calculated by the Cal Water WSA Water Factor Tool is equal to 0.097 gallons per day/square feet (GPD/SF). In order to evaluate the applicability of this demand factor to the development, the Project Proponent shared with EKI proprietary water use information for a similar Bay Area Research and Development (R&D) campus constructed in the last ten years. On the basis of the similar R&D campus' actual water use and our professional judgement, EKI considers a demand factor of 0.097 GPD/SF to be appropriately conservative for purposes of this WSA. With application of this demand factor, it is estimated that the total indoor water use for the proposed Project will be approximately 62 AFY by 2025 and 190 AFY by 2030, at full project buildout.

4.3 Outdoor Water Use

The Project Proponent provided estimated irrigated landscape water use in compliance with the Water Efficient Landscape Ordinance. According to Brookwater Inc. Irrigation Consultants, the total irrigated landscape area associated with the proposed Project is 116,622 SF, which includes a special landscape area of 22,644 SF (Brookwater, 2022). Based on the assessment provided by the Project Proponent, the estimated total water use (ETWU) for the proposed Project site is 4.86 AFY. This estimate is below the maximum applied water allowance (MAWA) of 5.62 AFY (Brookwater, 2022). Per the Project Proponent, it is assumed that one third of the irrigated landscape area will be completed by 2025, and the remaining area will be completed by 2030 (Alexandria, 2022b).

4.4 Distribution System Losses

Water distribution systems experience a degree of water loss over the course of transmission from the source to the customer. Although distribution system losses from the newly-constructed portion of the system's infrastructure associated with the proposed Project would initially be expected to be minimal, it is conservatively assumed that distribution system losses associated with delivering water for the proposed Project will ultimately be consistent with the proportion of non-revenue water loss per the most recent validated water loss audit submitted to DWR for the San Carlos system of the Mid-Peninsula District (i.e., 3.2%; DWR, 2021). **Table 1** shows the distribution system losses for the proposed Project, estimated at a total of 6.5 AFY at project buildout.

4.5 Total Project Water Demand

Historical water use for the current land use at the proposed Project site over the recent five year period (i.e., 2017 – 2021) ranged between 1.1 AFY and 3.8 AFY, and averaged 1.7 AFY (Cal Water,

2021d; 2022b). Thus, based on the above methodologies and assumptions, and adjusting for the existing water use at the site, the incremental increase in water demand associated with the proposed Project at full buildout and occupancy is estimated to be 200 AFY, as shown in **Table 1**. However, as discussed in Section 4.1, contingent on the proposed Project's compliance with the requirements included in Cal Water's Development Offset Program, the proposed Project is expected to result in no net increase in water demand to Cal Water's Mid-Peninsula District.

Table 1
Summary of Estimated Incremental Annual Project Water Demand
 Alexandria District for Science and Technology, San Carlos, California

Water Use	Project Characteristics (a)	Demand Factor (GPD/sq ft)	Total Water Demand (AFY) (b)				
			2025	2030	2035	2040	2045
Building 1	260,420 sq ft	0.097	0	28	28	28	28
Building 2	316,229 sq ft	0.097	0	35	35	35	35
Building 3	359,422 sq ft	0.097	0	39	39	39	39
Building 4	229,370 sq ft	0.097	0	25	25	25	25
Building 5	303,577 sq ft	0.097	33	33	33	33	33
Building 6	253,933 sq ft	0.097	28	28	28	28	28
Building 7 - Childcare Center	11,581 sq ft	0.097	0	1.3	1.3	1.3	1.3
Parking Garage 1 - Fitness Center/ Bike Shop	9,150 sq ft	0.097	1.0	1.0	1.0	1.0	1.0
Landscape Irrigation	257,254 sq ft	(c)	1.6	4.9	4.9	4.9	4.9
Distribution System Losses	--	3.2% (d)	2.1	6.5	6.5	6.5	6.5
Existing Site Demand	--	(e)	-1.7	-1.7	-1.7	-1.7	-1.7
Net Annual Water Demand (f)			64	200	200	200	200

Abbreviations:

"AFY" = acre-feet per year

"GPD" = gallons per day

"Cal Water" = California Water Service

"sq ft" = square feet

"DWR" = California Department of Water Resources

Notes:

- (a) Estimated building square footage for the proposed Project per Reference 1.
- (b) Buildout schedule for the proposed Project per Reference 2.
- (c) Landscape irrigation demands for the proposed Project per Reference 3. Given that one of three buildout phases is expected to be complete by 2025, it is assumed that landscape irrigation demands in 2025 will be equal to 1/3 of total landscape irrigation demands at full buildout.
- (d) Estimated distribution system water loss associated with delivery of water to the Project is based on a rate of 3.2% per Reference 4 and includes both real and apparent losses.
- (e) Existing site demands per Reference 5 and 6. Existing demands are subtracted from total projected water demands to show the incremental increase in demands associated with the Project (i.e., net increase in water demand). Existing demands are estimated as the average of the last five years of water use at the project site based on available metered data (2016-2020).
- (f) Total may not sum due to rounding.

References:

1. Alexandria, 2022a. Planning Submittal Sheet A0.01 Site Plan & Project Metrics, dated 17 December 2021, provided by Alexandria Real Estate Equities, Inc. 6 January 2022.
2. Alexandria, 2022b. Preliminary Construction Schedule, provided by Alexandria Real Estate Equities, Inc. 6 January 2022.
3. Brookwater, 2022. City of San Carlos Landscape Water Use Statement, Alexandria District Phase 1, prepared by Brookwater Inc., provided by Cal Water 24 January 2022.
4. DWR, 2020. WUEdata - Water Audit Report Data website, Water Audit Report for California Water Service Mid-Peninsula (San Carlos) for Calendar Year 2019, accessed 7 July 2021 (https://wuedata.water.ca.gov/awwa_plans).
5. Data provided by Cal Water 7 January 2021.
5. Data provided by Cal Water 30 August 2022.

5 CAL WATER MID-PENINSULA DISTRICT WATER DEMAND

Water Code Section 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).*
- (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).*
- (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.*

In support of the development of its 2020 UWMPs, Cal Water updated its estimates of projected future water demand for the three Peninsula Districts (Cal Water, 2021a). Consistent with the UWMP Act (Water Code §10610-10656), Cal Water's projected future water demand is estimated in five-year increments, between the years 2025 and 2045.

The projections include all existing demands within the Mid-Peninsula District, as well as for other large projects for which Cal Water has prepared WSAs in the three Peninsula Districts in the last five years (i.e., 201 Haskins Way, South SFPUC Site, South San Francisco Downtown Station, Oyster Point Development, and the 2017 Genentech Master Plan Update, all of which are located in the South San Francisco District).

Through implementation of the Development Offset Program, the proposed Project will not result in an increase in demands for the Mid-Peninsula District beyond those projected in the 2020 UWMP.¹ All other new developments that are expected to result in a net demand increase of 50 AFY within the three Peninsula Districts will also be required to comply with the Development Offset Program and thus will result in no incremental increase in demand on the system.

¹ Demand estimates for the District's service area through 2045 were developed using Cal Water's demand forecast model, which estimates future demands based on current water use for the District, anticipated growth based on projections by the Association of Bay Area Governments (ABAG), projected water conservation efforts, and anticipated passive conservation savings.

5.1 Current and Historical Water Demand Within the Cal Water Mid-Peninsula District Service Area

Historical water demand within the Cal Water Mid-Peninsula District service area from 2000 through 2020 is summarized in **Table 2**. The largest proportion of water demand within the Mid-Peninsula District service area is from the single-family residential (SFR) sector, which represented 58% of the demand in the 2016-2020 period. The remainder of the demand was split between commercial (20% of overall demand), multi-family residential (MFR) (15% of the overall demand), and institutional/government (6% of the overall demand; Cal Water, 2021d).

Water use from 2000 to 2008 within the Mid-Peninsula District remained fairly consistent, at an average of 18,578 AFY. A slight decrease in water use occurred from 2008 to 2012, which generally corresponds with the 2007 to 2009 drought and the economic downturn. Then, a significant drop in water demand occurred in 2014 to 2016, corresponding with the recent historic drought and mandatory state-wide water use restrictions and water conservation targets. Based on the data summarized in **Table 2**, the total water use averaged 13,734 AFY from 2016 through 2020.

5.2 Mid-Peninsula District Water Demand Projections

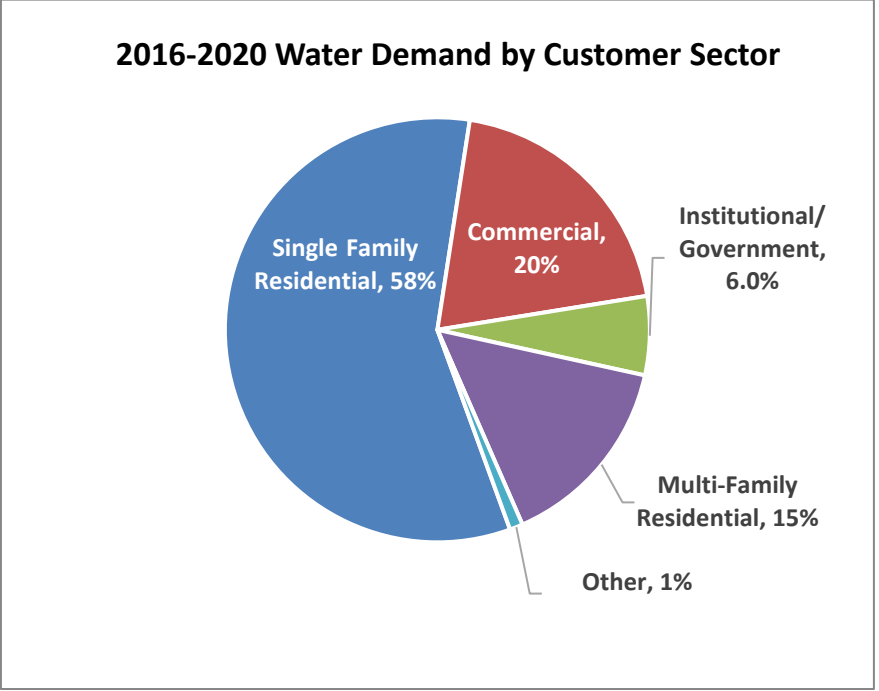
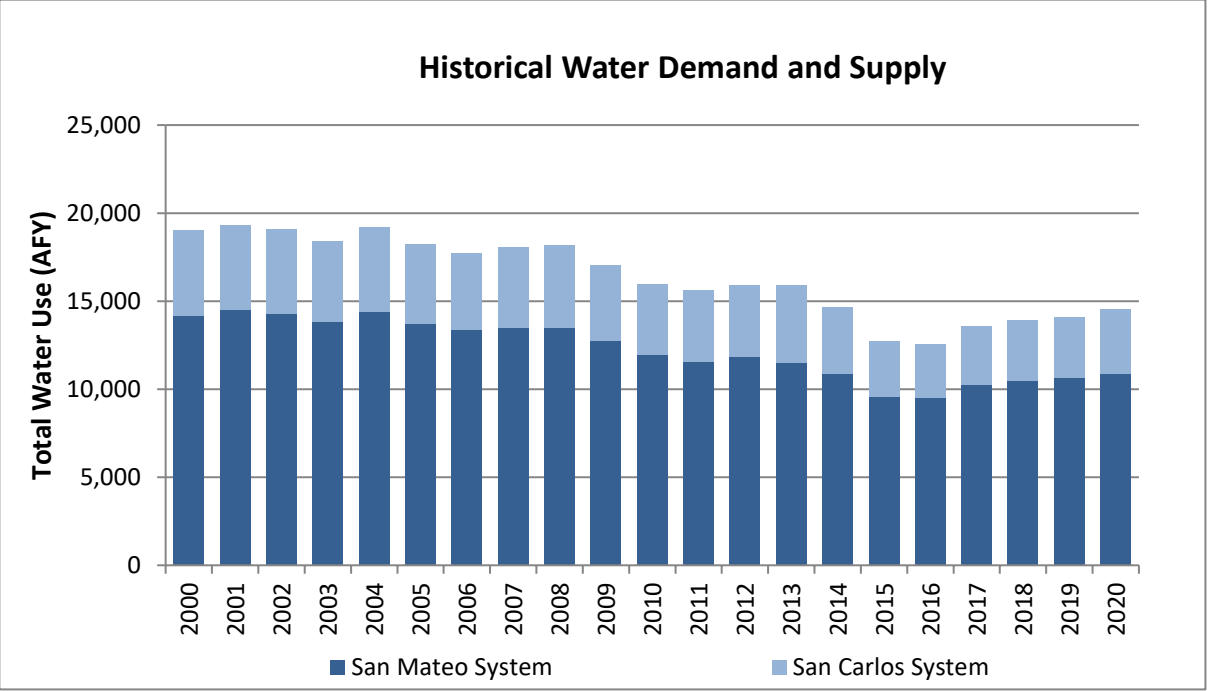
Projected water demands for the Mid-Peninsula District are documented in the Mid-Peninsula District 2020 UWMP and presented in **Table 3** in five-year increments. Taking into account historical water use, expected population increase and other growth, climatic variability, and other assumptions, water demand within the Mid-Peninsula District is projected to increase to 15,279 AFY by 2045, a change of 11% compared to the 2016-2020 average.

5.3 Total Projected Mid-Peninsula District Water Demand (Inclusive of the Proposed Project)

Table 3 also shows the projected water demands for the Mid-Peninsula District inclusive of the estimated proposed Project water demands. As shown, with the implementation of Cal Water's Development Offset Program, the proposed Project is not expected to result in any additive water demands to Cal Water's Mid-Peninsula District (i.e., inclusive of the proposed Project the total annual water demand will similarly be approximately 15,279 AFY in 2045).

Table 2
Historical Water Demand for the Mid-Peninsula District
 Alexandria District for Science and Technology, San Carlos, California

Category	Cal Water Historical Annual Water Demand (AFY) (a)																				
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
San Mateo System	14,186	14,507	14,306	13,813	14,372	13,719	13,373	13,500	13,481	12,784	11,949	11,542	11,819	11,496	10,890	9,561	9,533	10,267	10,495	10,630	10,904
San Carlos System	4,820	4,794	4,791	4,572	4,827	4,536	4,363	4,569	4,679	4,285	4,008	4,047	4,059	4,369	3,786	3,129	3,002	3,335	3,430	3,418	3,658
Total Water Demand	19,006	19,301	19,097	18,385	19,198	18,255	17,736	18,069	18,160	17,069	15,957	15,589	15,878	15,865	14,676	12,690	12,535	13,602	13,925	14,047	14,563



Abbreviations:

"AFY" = acre-feet per year

"Cal Water" = California Water Service

Notes:

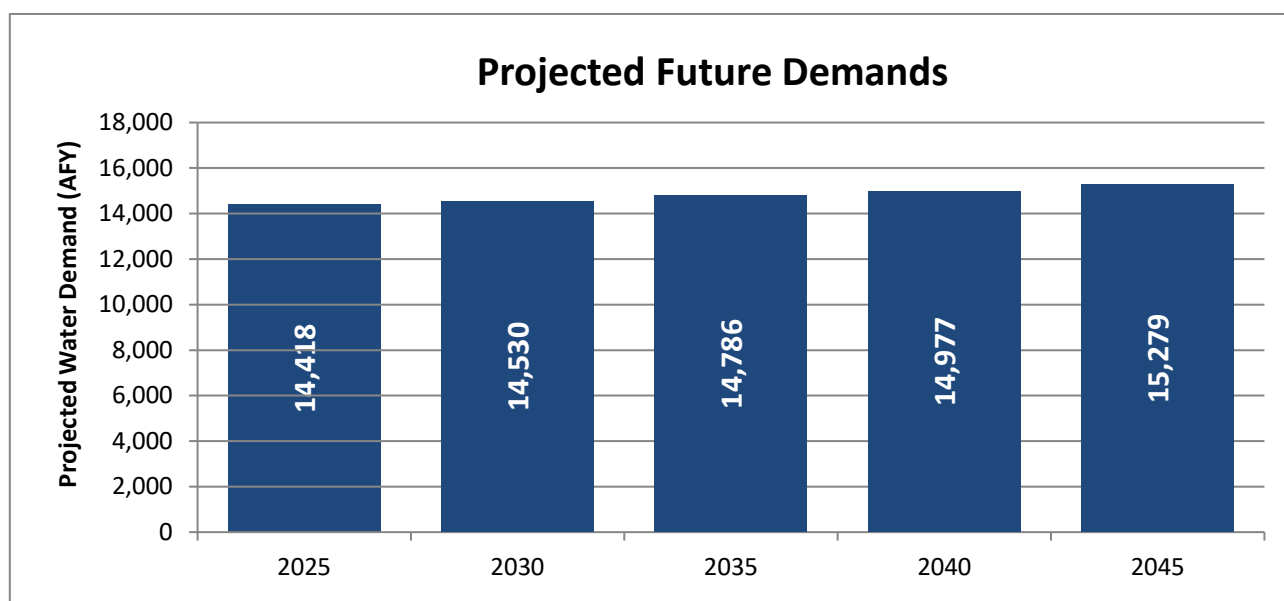
(a) Historical water demands per Reference 1. 2016-2020 water use by customer sector per Reference 2.

References:

1. Cal Water Demand Model for the Mid-Peninsula District, provided by 26 February 2021.
2. 2021-2025 Conservation Master Plan, Mid-Peninsula District, prepared by California Water Service, dated April 2021.

Table 3
Projected Future Water Demand for the Mid-Peninsula District
 Alexandria District for Science and Technology, San Carlos, California

	Projected Annual Water Demand (AFY)				
Year	2025	2030	2035	2040	2045
Mid-Peninsula District 2020 UWMP (a)	14,418	14,530	14,786	14,977	15,279
Proposed Project (b)	0	0	0	0	0
Total Water Demand (c)	14,418	14,530	14,786	14,977	15,279



Abbreviations:

"AFY" = acre-feet per year

"Cal Water" = California Water Service

"Proposed Project" = Alexandria District for Science and Technology

Notes:

- (a) Water demand projections for the Mid-Peninsula District were updated in 2021, and are presented per Reference 1.
- (b) In accordance with and through implementation of Cal Water's Development Offset Program, the Proposed Project will not result in a net increase in demands for the Mid-Peninsula District.
- (c) The total water demand is the sum of total water use and distribution system losses.

References:

- 1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.

6 CAL WATER MID-PENINSULA DISTRICT WATER SUPPLY

This section identifies Cal Water Mid-Peninsula District's water supplies and discusses the vulnerability of the various supplies to drought and other factors affecting water supply reliability.

6.1 Identification of Water Supply Rights

Water Code Section 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.

Pursuant to Water Code §10910(d)(1), a WSA is required to include identification of all water supply entitlements, water rights, and water service contracts relevant to the identified water supply for the proposed Project. In accordance with these requirements, this WSA includes a summary of Cal Water's water supply sources in the Mid-Peninsula District service area and the agreements between Cal Water and its wholesale supplier, the SFPUC, and other parties.

As discussed further below, three Cal Water Districts share one contractual allocation of supply from the City and County of San Francisco's RWS, and thus manage the supplies for all three Peninsula Districts collectively. Therefore, the consideration of supply availability below for the Mid-Peninsula District considers the collective supply available to all three Peninsula Districts (i.e., the Mid-Peninsula, Bear Gulch, and South San Francisco Districts).

6.1.1 SFPUC Regional Water System

6.1.1.1 RWS Supply Sources and Allocation

As shown in **Table 4**, the singular source of the water supply to the Cal Water Mid-Peninsula is treated water purchased from the City and County of San Francisco's RWS, which is operated by the SFPUC. Within the Mid-Peninsula District, Cal Water takes delivery from eleven active and three standby metered turnouts from RWS transmission lines (Cal Water, 2021a).

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

The business relationship between the City and County of San Francisco and its Wholesale Customers (including Cal Water) is largely defined by the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda County, San Mateo County, and Santa Clara County (Agreement) entered into in July 2009. The Agreement, which has a 25-year term, addresses water supply availability for the RWS as well as the methodology used by the SFPUC in setting wholesale water rates. This Agreement supersedes an earlier 25-year agreement signed in 1984, and was amended in 2019. The amendments included extending the deadline for SFPUC to decide whether to make San Jose and Santa Clara permanent customers, a revision to the drought allocation formula, and a deadline extension for completion of its Water Supply Improvement Plan, among other things. A copy of this Agreement (without signatures) is included in **Appendix A**.

The Agreement provides a 184 million gallons per day (MGD) Supply Assurance to the SFPUC's Wholesale Customers collectively (Cal Water, 2021a). This allocation was reached through negotiation in the early 1990s between the SFPUC and the Bay Area Water Users Association (BAWUA), the predecessor organization to BAWSCA, and was first signed by Cal Water, along with 29 other Bay Area water suppliers, as part of the 1984 Settlement Agreement and Master Water Sales Contract with San Francisco, supplemented by individual Water Supply Contracts (Cal Water, 2021a). The Supply Assurance is subject to reduction during periods of water shortage due to drought, emergencies, or other scenarios resulting in a water shortage. Each wholesale customer's share of the 184 MGD is referred to as their Individual Supply Guarantee (ISG). Although the Agreement expires in 2034, the Supply Assurance and ISG continue in perpetuity as both are subject to separate binding water allocation agreements described above, and would continue beyond the term of the Agreement. At expiration of the Agreement, it is likely that a new agreement will be entered into as was done at the termination of the prior 1984 agreement.

Cal Water's contractual allocation of SFPUC supply is shared among its Bear Gulch, Mid-Peninsula, and South San Francisco Districts. Cal Water's ISG for the three Peninsula Districts was originally 35.39 MGD (39,642 AFY). However, the acquisition of the Los Trancos County Water District in July 2005 resulted in the transfer of 0.11 MGD of ISG to Cal Water and in 2009 Cal Water acquired the Skyline County Water District, which also transferred its 0.181 MGD ISG to Cal Water. These acquisitions increased Cal Water's total ISG to 35.68 MGD (39,993 AFY) (Cal Water, 2021a).

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

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

- *Whether or not to make the cities of San Jose and Santa Clara permanent customers,*

- *Whether or not to supply the additional unmet supply needs of the Wholesale Customers beyond 2018, and*
- *Whether or not to increase the wholesale customer Supply Assurance above 184 mgd.*

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

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

Cal Water's collective current and projected purchase quantities are approximately equal to an average of 29.38 MGD in 2020 and 30.35 MGD in 2045,² respectively (Cal Water, 2021a). Both current and projected quantities are less than Cal Water's ISG of 35.68 MGD.

6.1.1.2 RWS Supply Reliability

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

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

Based on an analysis by the BAWSCA, if the current Bay-Delta Plan Amendment (July 2018) is implemented, the proposed unimpaired flow volumes would significantly reduce water supply available through the RWS during future drought conditions, and BAWSCA member agencies (including the Cal Water Mid-Peninsula District) would be required to reduce their water use by as much as 50% during drought years (BAWSCA, 2018b) if no new additional imported or local supplies are developed by the SFPUC or the Wholesale Customers.

² Projected RWS purchase volumes are based on having full local supply (i.e., 840 AFY in the Bear Gulch Reservoir and 1,534 AFY from the South San Francisco wells).

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

In December 2018, the State Water Resources Control Board (SWRCB) adopted amendments to the Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan Amendment) to establish water quality objectives to maintain the health of the Bay-Delta ecosystem. The SWRCB is required by law to regularly review this plan. The adopted Bay-Delta Plan Amendment was developed with the stated goal of increasing salmonid populations in three San Joaquin River tributaries (the Stanislaus, Merced, and Tuolumne Rivers) and the Bay-Delta. The Bay-Delta Plan Amendment requires the release of 30-50% of the “unimpaired flow”³ on the three tributaries from February through June in every year type. In SFPUC modeling of the new flow standard, it is assumed that the required release is 40% of unimpaired flow.

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

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

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

³ "Unimpaired flow represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds." (Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Dec. 12, 2018) p.17, fn. 14, available at: https://www.waterboards.ca.gov/plans_policies/docs/2018wqcp.pdf.)

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

Third, in recognition of the obstacles to implementation of the Bay-Delta Plan Amendment, the SWRCB Resolution No. 2018-0059 adopting the Bay-Delta Plan Amendment directed staff to help complete a “Delta watershed-wide agreement, including potential flow measures for the Tuolumne River” by March 1, 2019, and to incorporate such agreements as an “alternative” for a future amendment to the Bay-Delta Plan to be presented to the SWRCB “as early as possible after December 1, 2019.” In accordance with the SWRCB’s instruction, on March 1, 2019, SFPUC, in partnership with other key stakeholders, submitted a proposed project description for the Tuolumne River that could be the basis for a voluntary substitute agreement with the SWRCB (“March 1st Proposed Voluntary Agreement”). On March 26, 2019, the Commission adopted Resolution No. 19-0057 to support the SFPUC’s participation in the Voluntary Agreement negotiation process. To date, those negotiations are ongoing under the California Natural Resources Agency and the leadership of the Newsom administration.^{4,5}

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

- **Benefits of the AWSP are not accounted for in current supply projections.** As discussed in above, SFPUC is exploring options to increase its supplies through the AWSP. Implementation of feasible projects developed under the AWSP is not yet reflected in the supply reliability scenarios presented herein and is anticipated to reduce the projected RWS supply shortfalls.

⁴ California Natural Resources Agency, “Voluntary Agreements to Improve Habitat and Flow in the Delta and its Watersheds,” available at <https://files.resources.ca.gov/voluntary-agreements/>.

⁵ As of 29 October 2021, state regulators announced that the Voluntary Agreement negotiations process has ceased, with no agreement reached. San Francisco Chronicle, “California Drought: Key Talks Over Water Use Break Down, SF May Face Tighter Regulation,” available at <https://www.sfchronicle.com/sf/article/California-drought-Key-talks-over-water-use-16576132.php>

- Methodology for Tier One and Tier Two Wholesale drought allocations have not been established for wholesale shortages greater than 20%. As discussed further in Section 6.1.1.4, the current Tier One and Tier Two Plans are not designed for RWS supply shortages of greater than 20%. For UWMP planning purposes per BAWSCA guidance, the Tier One Wholesale share for a 16% to 20% supply reduction (62.5%) has been applied for reductions greater than 20% and an equal percent reduction has been applied across all Wholesale Customers. BAWSCA member agencies have not formally agreed to adopt this shortage allocation methodology and are in discussions about jointly developing an alternative allocation method that would consider additional equity factors if SFPUC is unable to deliver its contractual supply volume and cutbacks to the RWS supply exceed 20%.
- RWS demands are subject to change. The RWS supply availability is dependent upon the system demands. The supply scenarios are based on the total projected Wholesale Customer purchases provided by BAWSCA to SFPUC in January 2021. Many BAWSCA agencies have refined their projected demands during the UWMP process after these estimates were provided to SFPUC. Furthermore, the RWS demand projections are subject to change in the future based upon future housing needs, increased conservation, and development of additional local supplies.
- Frequency and duration of cutbacks are also uncertain. While the projected shortfalls presented in the UWMP appear severe, the actual frequency and duration of such shortfalls are uncertain. Based on the Hetch Hetchy and Local Simulation Model (HHLSTM) simulations provided by BAWSCA for the with Bay-Delta Plan Amendment scenario, rationing is anticipated to be required 20% of years for base year 2025 through 2035, 23% of all years for base year 2040, and 25% of years for base year 2045. In addition to the supply volumes, the above listed uncertainties would also impact the projected frequency and duration of shortfalls. As such, in addition to evaluating local options to increase supply reliability, Cal Water has placed high priority on working with BAWSCA and SFPUC in the upcoming years to better refine the estimates of RWS supply reliability and may amend the 2020 UWMP when new information becomes available.

The 2020 UWMP also discusses that the implementation of the Bay-Delta Plan Amendment was under negotiation, through Voluntary Settlement Agreement negotiations between SFPUC and SWRCB. However, as of October 2021, these negotiations have ceased,⁵ and no agreement has been reached. However, implementation of the Bay-Delta Plan Amendment is still pending. The SWRCB has yet to approve an implementation policy for water supply cutbacks associated with the Bay-Delta Plan Amendment, particularly during droughts. Further, there are currently over a dozen active lawsuits challenging the SWRCB's adoption of the Bay-Delta Plan Amendment. This litigation is in the early stages and there have been no dispositive court rulings as of this date. This is a dynamic situation and the projected drought cutback allocations may need to be revised before the next (i.e., 2025) UWMP depending on court decisions and/or an adopted implementation policy.

Numerous uncertainties remain surrounding the implementation of the Bay-Delta Plan Amendment. The water supply projections presented in the 2020 UWMP likely represent a worst-

case scenario in which the Bay-Delta Plan Amendment is implemented as written and do not account for implementation of SFPUC's AWSP or other local supply development by Cal Water and/or the other Wholesale Customers. Additional information regarding drought allocations can be found in Chapter 7 of the Mid-Peninsula District's 2020 UWMP.

6.1.1.3 Efforts to Increase RWS Supply Reliability

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

The WSIP program goal is to improve the SFPUC's ability to reliably meet its Retail and Wholesale Customers water needs in non-drought and drought periods. In 2008, the SFPUC adopted LOS Goals and Objectives in conjunction with the adoption of the WSIP. The SFPUC's LOS Goals and Objectives include: (a) meeting average annual water demand of 265 MGD from the SFPUC watersheds for Retail and Wholesale Customers during non-drought years for system demands through 2028; (b) meeting dry-year delivery needs through 2028 while limiting rationing to a maximum 20% system-wide reduction in water service during extended droughts; (c) diversifying water supply options during non-drought and drought periods; and (d) improving use of new water sources and drought management, including groundwater, recycled water, conservation, and transfers (SFPUC, 2018). The anticipated completion date of the overall WSIP is May 2023. As of September 2020, WSIP local projects are 100% complete and regional projects are 98.8% complete (SFPUC, 2021b).

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

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

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

Finally, Cal Water and other Wholesale Customers are pursuing the development of additional imported and local water supplies that would improve regional water supply reliability.

6.1.1.4 RWS Water Shortage Allocations

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

1. The Tier One Plan, which allocates water between San Francisco and the Wholesale Customers collectively; and
2. The Tier Two Plan, which allocates the collective wholesale customer share among the Wholesale Customers.

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

6.1.2 *Local Cal Water Surface Water Supply*

As noted above, the collective projected supplies and demands for all three Peninsula Districts are considered in this WSA. Surface water supplies a small portion of the three Peninsula Districts' water demands. Surface water is collected from the Bear Gulch Creek by two diversion facilities and is stored in Bear Gulch Reservoir prior to use. Cal Water's projected long-term average annual diversion amount from the Bear Gulch local surface water system is approximately 840 AFY, however, historical diversions averaged 537 AFY from 2016 to 2020 (Cal Water, 2021b).

The Bear Gulch District diverts water from two points of diversion (PODs) along the creek – the Upper POD (with an upstream area of 2.5 square miles) and the Lower POD (with an upstream area of 9.4 square miles). Diversions from the Upper and Lower PODs are each governed by

separate SWRCB-administered water rights (i.e., pre-1914 claimed water rights and post-1914 SWRCB-issues diversion permits/licenses) that specify the volumes, rates, and timing of allowed diversions at each POD. In addition to these SWRCB-administered water rights, diversions are further constrained by certain diversion limitations and minimum instream flow requirements imposed by the California Department of Fish and Wildlife (CDFW) at the Upper POD and by the National Oceanic and Atmospheric Administration (NOAA) at the Lower POD. There also exists a 1936 agreement with Stanford University that prohibits Cal Water from diverting more than 50% of the flows that pass by (i.e., are not diverted at) the Upper POD.

Water diverted from the Upper POD flows through a gravity conveyance pipeline to a junction point where it is joined by water diverted from the Lower POD, at which point the water is pumped into the Bear Gulch District-owned Bear Gulch Reservoir, a man-made storage facility impounded by an earthen dam. The Bear Gulch Reservoir is operated to have a minimum “dead pool” storage of 50 million gallons (MG), or approximately 153 AF. The maximum storage capacity of the reservoir has been reduced from 149 MG (547 AF) to 142.7 MG (438 AF), a limit imposed by the California Division of Safety of Dams (DSOD), based on a maximum storage elevation of 230 feet above mean sea level. Cal Water is undertaking capital improvements to Bear Gulch Reservoir to address DSOD’s seismic safety concerns, and may also considered increasing the maximum storage capacity. Outflows from Bear Gulch Reservoir are currently limited by the DSOD to the rate that causes a water surface elevation decline of 0.3 feet per day.

Water stored in Bear Gulch Reservoir is released and sent through the Bear Gulch District-owned Bear Gulch Water Treatment Plant (BGWTP) prior to addition to the distribution system. The BGWTP, which was placed into operation in 1977, has a rated capacity of 6.0 MGD. There the water is clarified, filtered, and chloraminated in compliance with the Surface Water Treatment Rule and the Safe Drinking Water Act. Based on data from Water Years 1981 through 2019, annual production from the reservoir has ranged from a high of 2,809 AF (915 MG) in 1983 to a low of 0 AF (0 MG) in 2014.

Recent analysis by the Bear Gulch District has shown that the projected long-term average annual diversion amount by the Bear Gulch District from the Bear Gulch local surface water system is approximately 840 AFY. This estimate considers the hydrology of the watershed, the various regulatory constraints that govern diversions (i.e., water rights and instream flow requirements), and current infrastructure limitations (i.e., pump, pipeline and treatment plant capacity). The storage capacity of Bear Gulch Reservoir is relatively small compared to average annual diversion/production, and therefore there is typically no carryover storage from one year to the next. Furthermore, given the various constraints on diversions at the Bear District’s two PODs under the SWRCB-administered water rights and the CDFW/NOAA-governed minimum instream flow requirements, the allowable diversions by the Bear Gulch District are significantly lower during dry years even though the creek itself maintains flow. Although local surface water diversions (and subsequent treatment and use of local surface water) have occurred historically during dry years, and the Bear District’s analysis indicates that some diversions are likely to occur

in future dry years⁶, for the purposes of its 2020 UWMP the Bear Gulch District conservatively assumed that local surface water supplies will be zero during single dry and multiple dry years over the planning horizon.

6.1.3 Groundwater Supply

Water Code Section 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) A description of any groundwater basin or basins from which the proposed project will be supplied.*
(B) 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.
(C) For a basin that has not been adjudicated that is a basin designated as high- or medium-priority pursuant to Section 10722.4, information regarding the following:
 - (i) Whether the department has identified the basin as being subject to critical conditions of overdraft pursuant to Section 12924.*
 - (ii) If a groundwater sustainability agency has adopted a groundwater sustainability plan or has an approved alternative, a copy of that alternative or plan.**(D) For a basin that has not been adjudicated that is a basin designated as low- or very low priority pursuant to Section 10722.4, 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 current 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, historic 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*

⁶ Diversions from the Bear Gulch Creek system are estimated at 291 AF with a 90% exceedance probability.

be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic 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 supply 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 San Mateo Plain Basin (DWR Basin No. 2-009.03) underlies the proposed Project and the majority of the Mid-Peninsula District service area, as shown on **Figure 3**. The Mid-Peninsula District does not currently pump groundwater to serve its customers and does not have future plans to add groundwater to its supply portfolio. However, groundwater pumped from the Westside Basin constitutes a portion of supply to the South San Francisco District. Additional detail regarding basin description, groundwater management, and historical groundwater use in the Westside Basin is included below.

6.1.3.1 Basin Description

The Westside Basin (DWR Basin No. 2-35; Basin) underlies the South San Francisco District service area.⁷ The Basin covers an area of approximately 25,400 acres and is separated from the Lobos Basin to the north by a northwest trending bedrock ridge through the northeastern part of Golden Gate Park. The San Bruno Mountains bound the Basin on the east. The San Andreas Fault and Pacific Ocean form its western boundary and its southern limit is defined by bedrock high that separates it from the San Mateo Plain Subbasin. The Basin is connected to the Pacific Ocean on the northwest and San Francisco Bay on the southeast (Cal Water, 2021a). The Basin is not adjudicated and, in its recent evaluation of California groundwater basins, DWR determined that the Basin was not in a condition of critical overdraft and designated the Basin as low priority (DWR, 2019). Geologically, the Basin is comprised of two groups, consisting of bedrock and unconsolidated materials. The impermeable bedrock is composed of consolidated sediment of the Franciscan Complex and the Great Valley Sequence of late Jurassic and Cretaceous age. Unconsolidated materials overlying the bedrock comprise the water bearing formations. These consist of dune sands, the Colma Formation of Pleistocene age and the Merced Formation of Pleistocene/ Pliocene age (Phillips and others, 1993; DWR, 2006).

Groundwater used for water supply within the Basin is generally pumped from in the Merced and Colma Formations. The Merced Formation is composed of sand and thin interbedded silt and clay layers of shallow marine depositional origin. The Colma Formation overlies the Merced Formation and consists of fine-grained sand, silty sand, and inter-fingered clay layers (DWR, 2006;

⁷ A very small portion (approximately 8%) of the South San Francisco District service area overlies the Visitacion Valley Basin (DWR Basin No. 2-32). However, no groundwater is used from this basin and so the basin is not discussed further herein.

2016). Water is produced from the coarse-grained layers within these complex, layered formations (WRIME, 2012).

The Basin is subdivided for management purposes into northern and southern portions by the county line separating San Francisco and San Mateo counties. The county-line boundary between the “North Westside Basin” and the “South Westside Basin” does not have hydrogeological significance other than influencing the jurisdictional distribution of groundwater pumping. No geologic features restrict groundwater flow between the northern and southern parts of the Basin (SFPUC, 2016). Groundwater pumping has historically provided up to 50% of local water supply in the South Westside Basin for the communities of San Bruno, Daly City, and South San Francisco (WRIME, 2012), although current usage is significantly less as a proportion.

The Basin is not adjudicated and, in its recent evaluation of California groundwater basins, DWR determined that the Basin was not in a condition of critical overdraft and was a low priority basin (DWR, 2019). Recent evaluations by others have also found that current pumping is estimated to be within the Basin’s safe yield (WRIME, 2012).

6.1.3.2 Groundwater Management

As described below, several groundwater management programs are actively implemented within the Basin that have relevance to the Cal Water South San Francisco District.

South Westside Basin Groundwater Management Plan

The South Westside Basin Groundwater Management Plan (GWMP) was completed in July 2012 as a joint effort between Cal Water, the SFPUC, and the Cities of Daly City and San Bruno that superseded prior groundwater management and planning efforts (WRIME, 2012). The GWMP was prepared pursuant to Assembly Bill 3030 (AB 3030; codified in CWC §10750 et seq.).⁸

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 (WRIME, 2012). The GWMP development was supported by a companion effort by the City of Daly City to develop a numerical groundwater model for the Basin. The GWMP includes the following elements:

- Groundwater Storage and Quality Monitoring
- Control of Saltwater Intrusion
- Conjunctive Use
- Recycled Water
- Source Water Protection

⁸ AB 3030 provided a systematic procedure to develop a groundwater management plan by local agencies overlying DWR Bulletin 118 groundwater basins. Upon adoption of such plan, these agencies could possess the same authority as a water replenishment district to “fix and collect fees and assessments for groundwater management” (CWC §10754) (WRIME, 2012).

Among other things, the GWMP provides steps for monitoring water quality and quantity in the South Westside Basin. Each groundwater well identified in the GWMP has defined triggers for overdraft, seawater intrusion, and various water quality measures. The GWMP also identifies two levels of trigger thresholds for each groundwater well based on historical water levels, and actions to address the trigger that is met.

Regional Groundwater Storage and Recovery Project

In a joint effort between SFPUC, Cal Water, Daly City, and San Bruno, the Regional Groundwater Storage and Recovery Project (RGSR Project) was developed to support groundwater and surface water management in the South Westside Basin and improve the reliability of the RWS (Cal Water, 2021c). The RGSR Project agreement was signed in December 2014 following two phases of successful pilot programs. As part of the RGSR project agreement, the municipal pumpers within the South Westside Basin agreed to self-limit pumping within the South Westside basin to no more than 6.9 MGD, of which Cal Water’s designated quantity is an annual average rate of 1.37 MGD or 1,534 AFY.

Under the RGSR project, the SFPUC will provide supplemental RWS water to Cal Water and the other “Partner Agencies” (i.e. Cal Water, Daly City, and San Bruno) during normal and wet years and in turn the Partner Agencies will reduce their groundwater pumping in their own wells to allow the Basin to recharge.⁹ During dry years, the Partner Agencies may pump from RGSR project wells in addition to resuming use of their own wells up to designated quantities. The in-lieu recharge (i.e. “put”) and additional groundwater pumping from RGSR wells (i.e. “take”) under the RGSR project are tracked under the Westside Basin Storage Account. Production wells in the Basin are considered to be either a RGSR Well Facility or a Partner Agency Facility, where only production from RGSR Well facilities is tracked under the RGSR project.

The RGSR Project is one of the SFPUC’s WSIP projects and provides additional dry-year water supply to help achieve the WSIP goals to increase RWS supply reliability. The RGSR Project consists of the construction of up to 16 new recovery wells and associated facilities, such as pumping systems, pipelines, and chemical treatment equipment. Construction for this project began in April 2015 and is anticipated to be complete in winter 2021 (SFPUC, 2021c).

Sustainable Groundwater Management Act

In 2014, the California State Legislature enacted the Sustainable Groundwater Management Act (SGMA), with subsequent amendments in 2015. The SGMA requires the formation of Groundwater Sustainability Agencies (GSAs) and the development and implementation of Groundwater Sustainability Plans (GSPs) for groundwater basins that are designated by DWR as medium or high priority.

⁹ Supplemental deliveries do not count towards the Member Agencies’ ISGs.

The Basin is currently categorized by DWR as a very low priority basin (DWR, 2019). As such, the Basin is not subject to the requirements of SGMA. However, as discussed above, the Basin has been actively managed for years, including the establishment of pumping limitations.

6.1.3.3 Groundwater Use

Cal Water operates five groundwater production wells within its South San Francisco District service area (Cal Water, 2021c). Historical groundwater pumping from 2010 through 2019 and projected groundwater pumping through 2045 for the four municipal groundwater users in the Basin are shown in **Table 5**. Groundwater use was reduced in 2016 and later due to in-lieu recharge as part of the RGSF Project discussed above in Section 6.1.4.2. From 2010 through 2019, the average total groundwater production by these entities was approximately 5,329 AFY, of which 550 AFY was by Cal Water. The total projected groundwater pumping by the RGSF Partner Agencies is conservatively assumed to be equal to each agency's agreed-upon pumping limitation from 2020 through 2045, of which Cal Water is projecting to pump up to 1,534 AFY (Cal Water, 2021c). The projected groundwater pumping by the City of San Francisco is based on projected pumping values included in Table 6-5 of SFPUC's 2020 UWMP (SFPUC, 2021a).

6.1.4 *Cal Water Bay Area Water Supply Reliability Study*

Cal Water is currently in the process of developing the Bay Area Regional Water Supply Reliability Study using integrated resource planning practices to create a long-term supply reliability strategy through 2050 for the three Peninsula Districts. The study will create long-term strategies to address a wide range of water supply challenges including climate change, new regulatory requirements (e.g., the Bay-Delta Plan Amendment), and potential growth in demands due to new development. The Bay Area Water Supply Reliability Study is anticipated to be complete by 2021.

6.1.4.1 Potential Recycled Water Development

The Bay Area Water Supply Reliability Study will explore potential recycled water developments to augment supply in the three Peninsula Districts. Recycled water is not currently provided in the Mid-Peninsula District service area and Cal Water has not projected recycled water use in its 2020 UWMP (Cal Water, 2021a). However, there is currently a coordinated effort between Cal Water and other partners to potentially develop recycled water for various uses.

Cal Water is participating in the development of the Potable Reuse Exploratory Plan (PREP) Project, a purified water project that could provide 6 to 12 MGD of water supply through reservoir water augmentation or blending with other supplies once rules and procedures for potable reuse are established by the SWRCB. Treated wastewater from Silicon Valley Clean Water (SVCW) and/or the City of San Mateo would go through an advanced water treatment plant to produce purified water that meets state and federal drinking water quality standards. Project partners include Cal Water, the SFPUC, BAWSCA, SVCW, Redwood City, Foster City, and the City of San Mateo. Partner agencies are contributing financial and staff resources towards the work effort. Potential scenarios include a direct connection to the Bear Gulch District or the Mid-Peninsula District. This WSA does not rely on an assumption of recycled water as a supply source.

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

Water Code Section 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 potable water supply sources to the three Peninsula Districts, as described above, are surface water purchased from the RWS, local surface water from the Bear Gulch Reservoir, and groundwater. Historical supplies from 2016 through 2020 and projected normal year supplies through 2045 for each source are shown in **Table 6**.¹⁰ This table also shows the historical and projected demand for each of the three Peninsula Districts, based on updated demand projections included in their respective 2020 UWMPs. **Table 7** shows the projected demand by the three Peninsula Districts, with the inclusion of the proposed Project, and the total available supply through 2045. The current and planned future water supply within the three Peninsula Districts for normal hydrologic years is expected to meet all projected demands, which are estimated to be 35,869 AFY by 2045.

The anticipated dry-year supply estimates presented below are based on the delivery estimates provided by Cal Water as part of the 2020 UWMP (Cal Water, 2021a). As discussed above, BAWSCA provided a revised methodology to allocate RWS supplies during projected future single dry and multiple dry years in the instance where the supply shortfalls are greater than 20% in support of 2020 UWMP development. However, BAWSCA member agencies are in discussions about jointly developing an allocation method that would consider additional equity factors in the event that SFPUC is not able to deliver its contractual supply volume, and its cutbacks to the RWS supply exceed 20%.

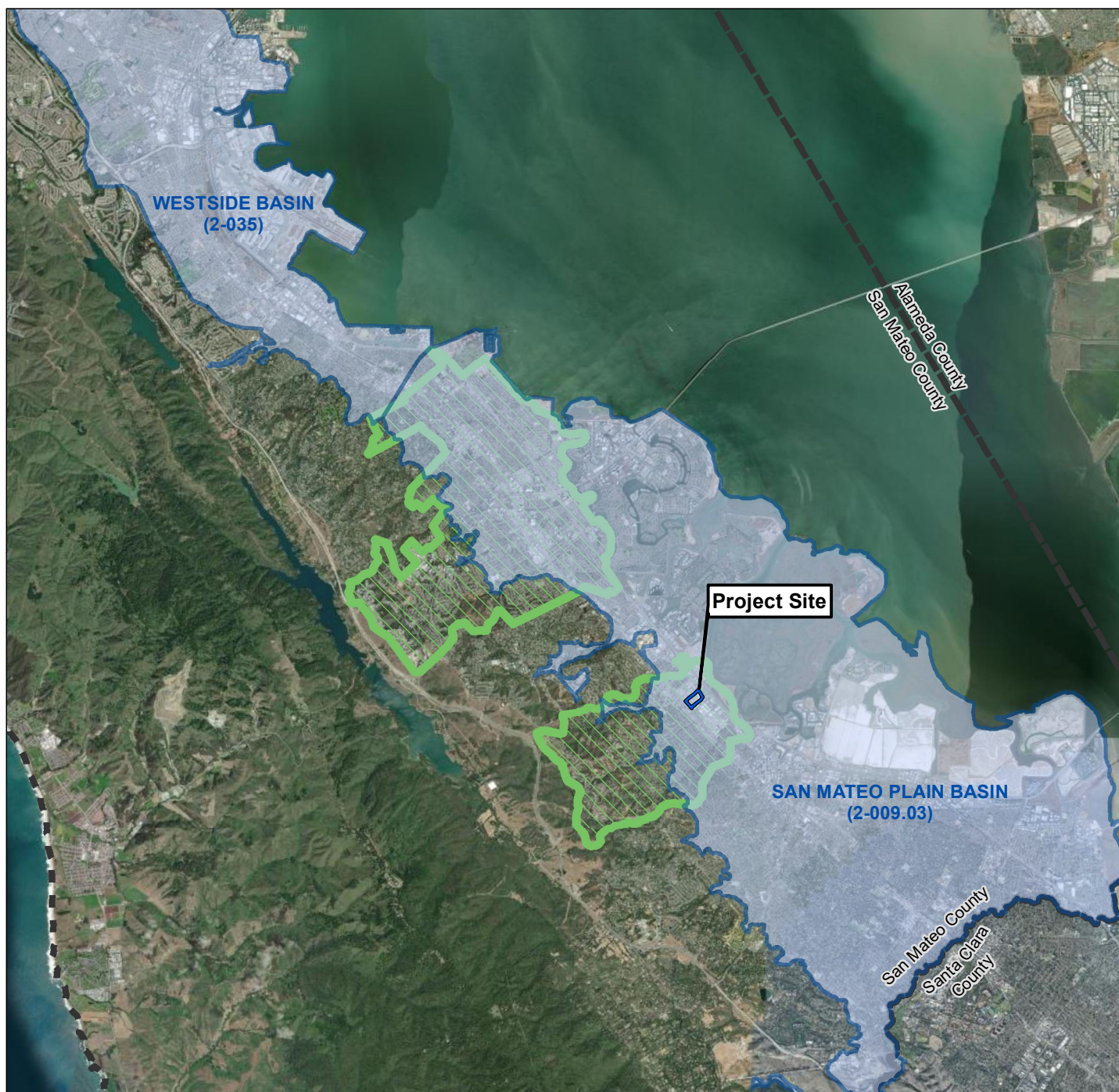
During single dry years, the annual supply within the three Peninsula Districts' service areas will be reduced to 21,039 AFY by 2045. Supply shortfalls relative to total demands during single dry years are estimated to range between 33% in 2025 and 43% in 2045 (see **Table 8**).

During multiple dry years, the 2020 UWMP estimates that annual supply within the three Peninsula Districts' service areas will be reduced to 23,615 AFY in 2025 during the first year of a drought, and 20,492 AFY in 2025 in the second, third, fourth, and fifth years of drought. The 2020 UWMP further estimates that in 2045, annual supply will be reduced to 20,954 AFY during the first three years of a drought, and 18,061 AFY in fourth and fifth years of drought. Supply

¹⁰ Projected groundwater and Bear Gulch Reservoir supply is shown based on the 2020 UWMP. Projected purchased SFPUC supply in normal years is based on Cal Water's contract allocation of 35.68 MGD (39,993 AFY).

shortfalls relative to total demands are estimated to range between 35% during the first year of a drought in 2025 to 52% during the fifth year of a drought in 2045 (see **Table 9**).

If the “worst-case” supply scenario described under Section 6.1.1.2 in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for the implementation of actions identified as part of SFPUC’s AWSP, BAWSCA’s Long-Term Water Supply Reliability Strategy, or Cal Water’s Water Supply Reliability Study, shortfalls of up to 52% are projected during drought years. To address this issue, under Rule 14.1, Cal Water plans to enact its Water Shortage Contingency Plan (WSCP), which includes Mandatory Staged Restrictions of Water Use. The WSCP systematically identifies ways in which the three Peninsula Districts can reduce water demands during dry years. The overall reduction goals in the WSCP are established for six drought stages and address water demand reductions over 50%. The WSCPs for all three Peninsula Districts were revised as part of the 2020 UWMP update process, and include detailed information about how drought risks are evaluated by Cal Water on an annual basis to determine the potential need for reductions.



Legend

	Proposed Project		Groundwater Basin
	MP District Service Area		County Boundary

Abbreviations

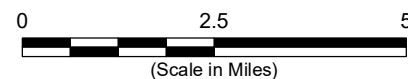
Cal Water = California Water Service
DWR = California Department of Water Resources
MP = Mid-Peninsula

Notes

1. All locations are approximate.

Sources

1. Basemap is ESRI's ArcGIS Online world aerial map, obtained 6 September 2022.
2. DWR groundwater basins are based on the boundaries defined in California's Groundwater, Bulletin 118-2016 Update.
3. Boundary data for Cal Water districts' service areas received from Cal Water on 16 October 2017.



Regional Setting and Groundwater Basin

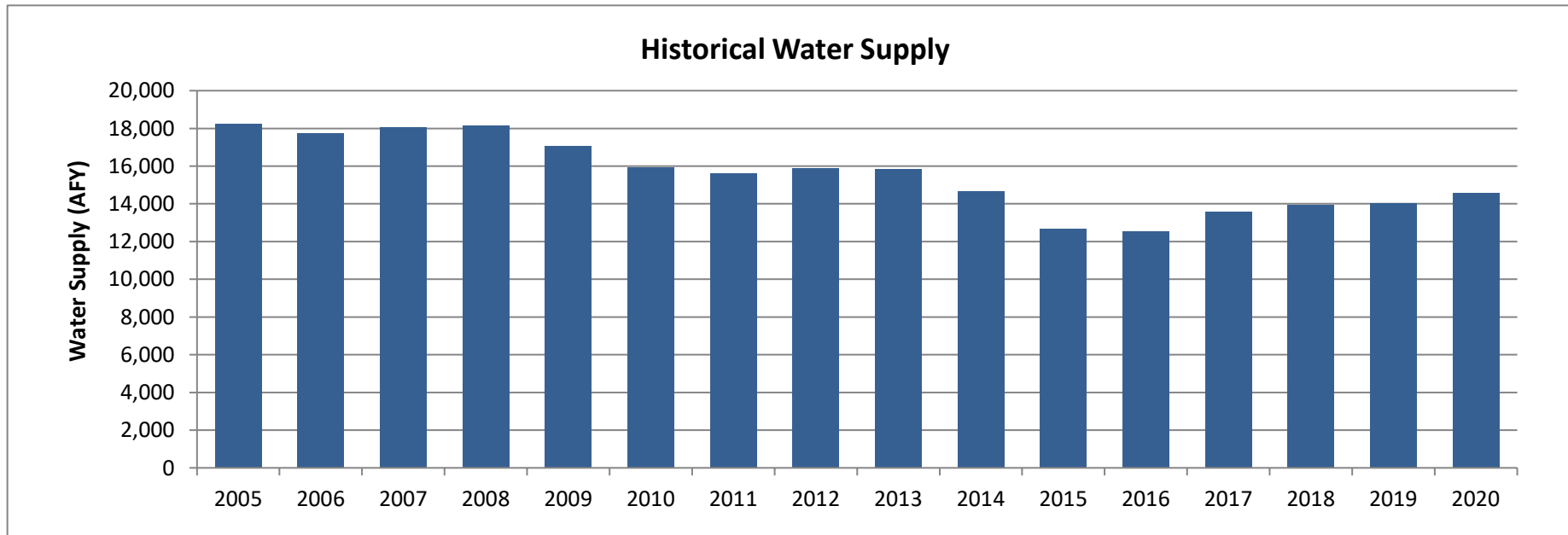
Alexandria District for Science and Technology
San Carlos, CA
September 2022
EKI C00112.00

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& water

Figure 3

Table 4
Historical Water Supply for the Mid-Peninsula District
 Alexandria District for Science and Technology, San Carlos, California

Water Supply Source	Historical Water Supply (AFY) (a)															
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Purchased Surface Water (b)	18,255	17,736	18,069	18,160	17,069	15,957	15,589	15,878	15,865	14,676	12,690	12,535	13,602	13,925	14,047	14,563
Total Water Supply	18,255	17,736	18,069	18,160	17,069	15,957	15,589	15,878	15,865	14,676	12,690	12,535	13,602	13,925	14,047	14,563



Abbreviations:

"AFY" = acre-feet per year

"Cal Water" = California Water Service

Notes:

(a) Historical water supply values per Reference 1.

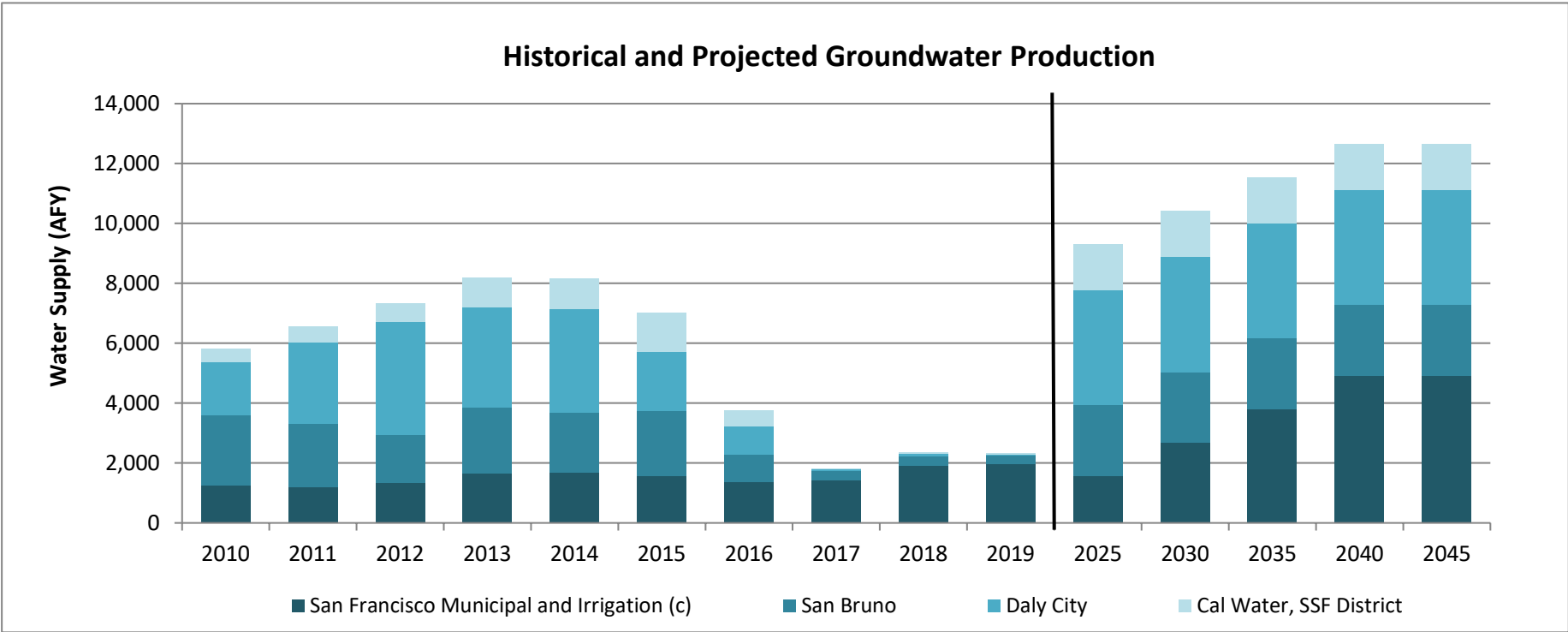
(b) Water purchased from the San Francisco Public Utilities Commission Regional Water System. Cal Water has an Individual Supply Guarantee of 35.68 million gallons per day (39,993 AFY), which is shared among its Mid-Peninsula, Bear Gulch, and South San Francisco Districts.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.

Table 5
Historical and Projected Groundwater Pumping from the Westside Basin
 Alexandria District for Science and Technology, San Carlos, California

Water Supplier	Historical Groundwater Production (AFY) (a)										Projected Groundwater Production (AFY) (b)				
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2025	2030	2035	2040	2045
Cal Water, SSF District	453	515	606	995	1,028	1,312	528	0.4	35	31	1,534	1,534	1,534	1,534	1,534
Daly City	1,743	2,699	3,772	3,351	3,452	1,980	941	62	59	56	3,840	3,840	3,840	3,840	3,840
San Bruno	2,364	2,129	1,596	2,198	2,025	2,164	937	303	333	277	2,350	2,350	2,350	2,350	2,350
San Francisco Municipal and Irrigation (c)	1,256	1,197	1,339	1,651	1,672	1,570	1,359	1,435	1,911	1,960	1,569	2,690	3,811	4,932	4,932
Total Groundwater Supply	5,816	6,540	7,313	8,195	8,177	7,026	3,765	1,800	2,338	2,324	9,293	10,414	11,535	12,656	12,656



Abbreviations:

"AFY" = acre-feet per year
 "Cal Water" = California Water Service
 "SSF" = South San Francisco District

Notes:

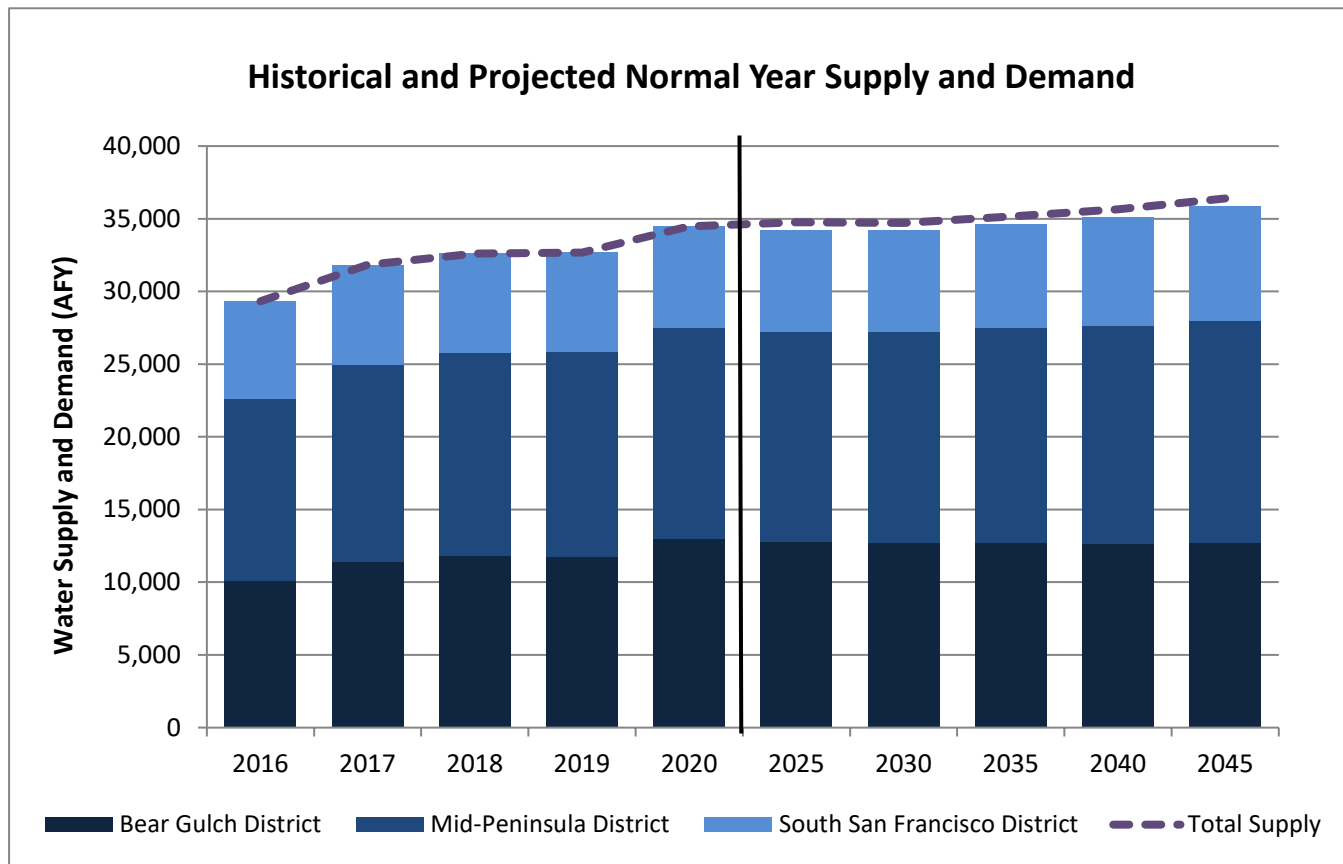
- (a) Historical groundwater pumping as reported on Table 1 in Reference 1.
- (b) Projected groundwater pumping by the South San Francisco District, City of Daly City, and City of San Bruno is conservatively estimated as the maximum apportionment for each partner agency as dictated by the Regional Groundwater Storage and Recovery Project, per Reference 2.
- (c) Projected groundwater pumping by the City of South San Francisco provided per Reference 3.

References:

1. 2019 Annual Groundwater Monitoring Report, Westside Basin, San Francisco and San Mateo Counties, California prepared by the San Francisco Public Utilities Commission, dated April 2020.
2. Draft Environmental Impact Report for the San Francisco Public Utilities Commission's Regional Groundwater Storage and Recovery Project, dated April 2013.
3. 2020 Urban Water Management Plan for the City and County of San Francisco, prepared by the San Francisco Public Utilities Commission, dated June 2021.

Table 6
Historical and Projected Supplies by Source
 Alexandria District for Science and Technology, San Carlos, California

Water Supplier	Historical Supply and Demand (AFY)					Projected Supply and Demand (AFY)				
	2016	2017	2018	2019	2020	2025	2030	2035	2040	2045
Historical and Projected Demand (a)										
South San Francisco District	6,687	6,842	6,857	6,867	6,936	7,016	6,956	7,108	7,473	7,896
Mid-Peninsula District	12,534	13,601	13,924	14,046	14,563	14,418	14,530	14,786	14,977	15,279
Bear Gulch District	10,105	11,395	11,834	11,772	12,972	12,796	12,699	12,730	12,675	12,694
Total Demand	29,326	31,838	32,614	32,684	34,471	34,230	34,185	34,624	35,125	35,869
Historical and Projected Supply (All Districts) (b)										
Purchased (SFPUC)	27,180	29,204	30,909	30,310	32,932	32,383	32,338	32,777	33,278	34,022
Bear Gulch Reservoir	757	1,100	170	839	0	840	840	840	840	840
Groundwater	1,390	1,535	1,535	1,535	1,539	1,534	1,534	1,534	1,534	1,534
Total Supply	29,326	31,838	32,614	32,684	34,471	34,757	34,712	35,151	35,652	36,396
Supply Minus Demand	0	0	0	0	0	527	527	527	527	527



Abbreviations:

"AFY" = acre-feet per year
 "Cal Water" = California Water Service
 "MGD" = millions gallons per day
 "SFPUC" = San Francisco Public Utilities Commission
 "UWMP" = Urban Water Management Plan

Table 6

Historical and Projected Supplies by Source

Alexandria District for Science and Technology, San Carlos, California

Notes:

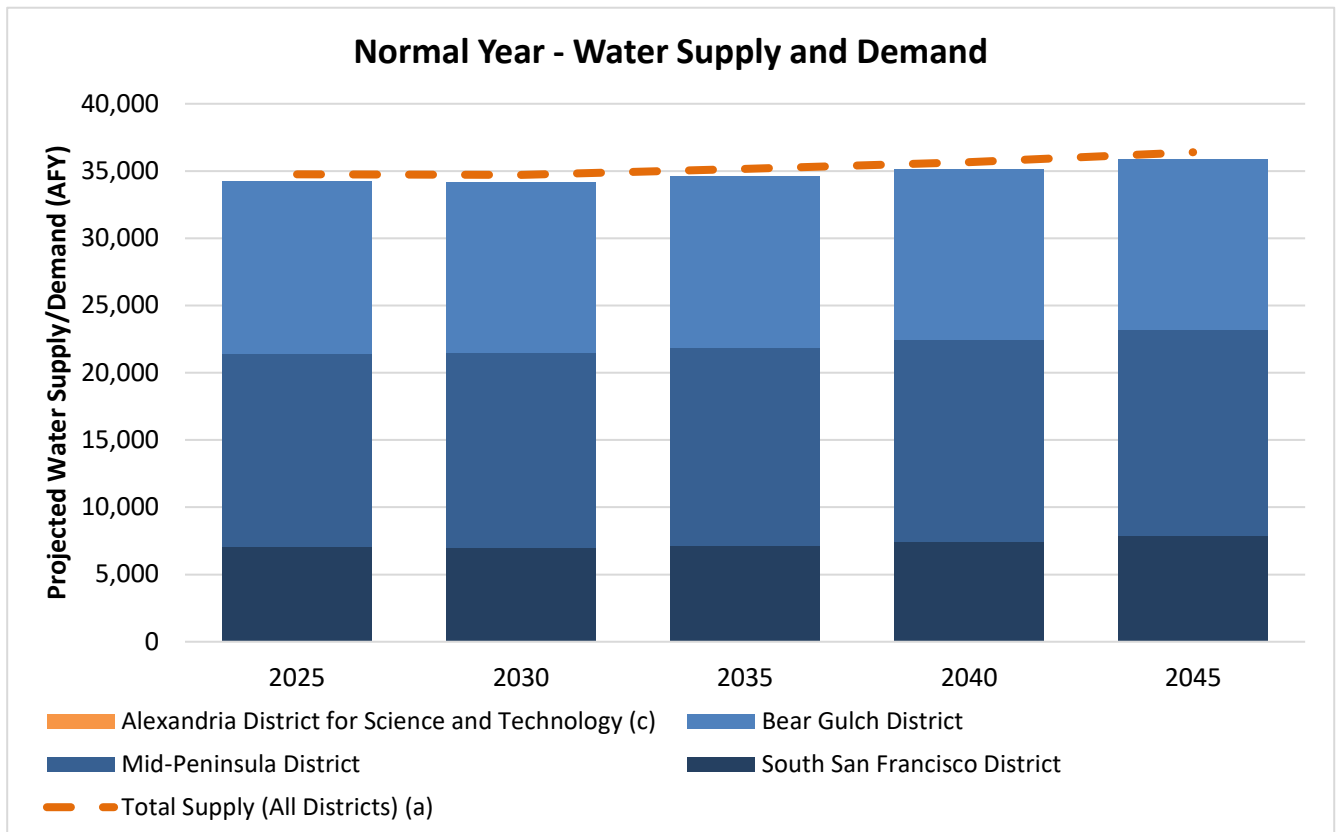
- (a) Cal Water updated its water demand projections for the South San Francisco, Bear Gulch, and Mid-Peninsula Districts in 2021, per References 1-3. It should be noted that the projected demands for the South San Francisco District have decreased by 527 AFY relative to those reported in the South San Francisco District 2020 UWMP because the Southline Specific Plan Project, which had previously been included in the demand projections for the South San Francisco District, is now expected to comply with the Development Offset Program and will not result in a net increase in demands.
- (b) Projected supply is assumed equal to projected demands and inclusive of supplies available for all three districts that share the same contractual allocation of water from SFPUC, per References 1-3. The projected purchase volumes are based on having full local supply (i.e., 840 AFY in the Bear Gulch Reservoir and 1,534 AFY from the South San Francisco wells), per References 2 and 3. Projected SFPUC supply is based on total demand minus local supplies and does not exceed Cal Water's contractual allocation of 35.68 MGD, or 39,993 AFY.

References:

- 1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.
- 2. 2020 Urban Water Management Plan, South San Francisco District, prepared by California Water Service, dated June 2021.
- 3. 2020 Urban Water Management Plan, Bear Gulch District, prepared by California Water Service, dated June 2021.

Table 7
Projected Normal Year Water Supply and Demand
 Alexandria District for Science and Technology, San Carlos, California

Water Supply Source	Projected Normal Year Supply and Demand (AFY)				
	2025	2030	2035	2040	2045
Total Supply (All Districts) (a)	34,757	34,712	35,151	35,652	36,396
Demand (b)					
South San Francisco District	7,016	6,956	7,108	7,473	7,896
Mid-Peninsula District	14,418	14,530	14,786	14,977	15,279
Alexandria District for Science and Technology (c)	0	0	0	0	0
Bear Gulch District	12,796	12,699	12,730	12,675	12,694
Total Potable Water Demand Inclusive of Project and Other Known Development	34,230	34,185	34,624	35,125	35,869
Supply Shortfall (% demand)	None	None	None	None	None



Abbreviations:

"AFY" = acre-feet per year
 "Cal Water" = California Water Service
 "MGD" = millions gallons per day
 "SFPUC" = San Francisco Public Utilities Commission
 "UWMP" = Urban Water Management Plan

Table 7
Projected Normal Year Water Supply and Demand
Alexandria District for Science and Technology, San Carlos, California

Notes:

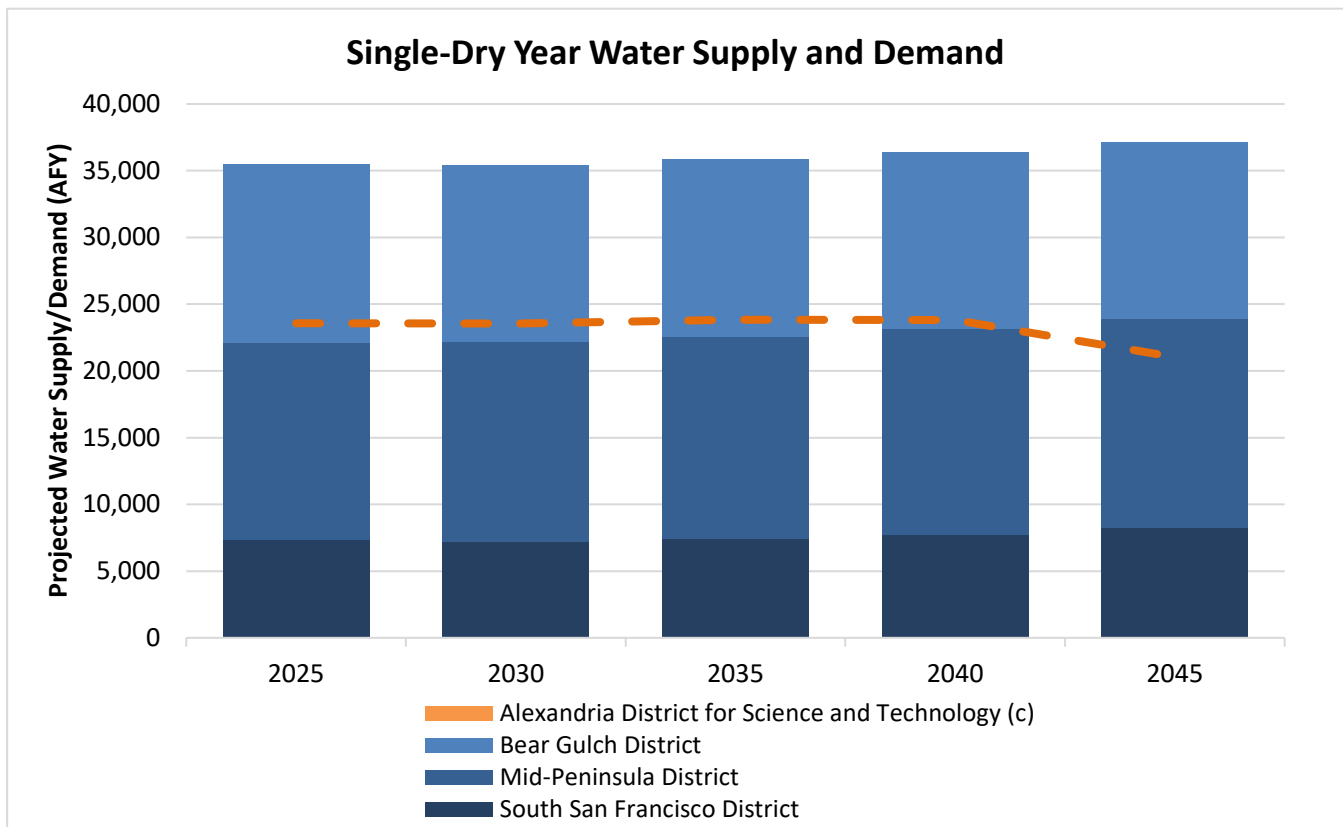
- (a) Projected supply is assumed equal to projected demands and inclusive of supplies available for all three districts that share the same contractual allocation of water from SFPUC, per References 1-3. The projected purchase volumes are based on having full local supply (i.e., 840 AFY in the Bear Gulch Reservoir and 1,534 AFY from the South San Francisco wells), per References 2 and 3. Projected SFPUC supply is based on total demand minus local supplies and does not exceed Cal Water's contractual allocation of 35.68 MGD, or 39,993 AFY.
- (b) Cal Water updated its water demand projections for the South San Francisco, Bear Gulch, and Mid-Peninsula Districts in 2021, per References 1-3. It should be noted that the projected demands for the South San Francisco District have decreased by 527 AFY relative to those reported in the South San Francisco District 2020 UWMP because the Southline Specific Plan Project, which had previously been included in the demand projections for the South San Francisco District, is now expected to comply with the Development Offset Program and will not result in a net increase in demands.
- (c) In accordance with and through implementation of Cal Water's Development Offset Program, the Project will not result in a net increase in demands for the district.

References:

- 1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.
- 2. 2020 Urban Water Management Plan, South San Francisco District, prepared by California Water Service, dated June 2021.
- 3. 2020 Urban Water Management Plan, Bear Gulch District, prepared by California Water Service, dated June 2021.

Table 8
Projected Single Dry Year Water Supply and Demand
 Alexandria District for Science and Technology, San Carlos, California

Water Supply Source	Projected Dry Year Supply and Demand (AFY)				
	2025	2030	2035	2040	2045
Total Supply (All Districts) (a)	23,580	23,546	23,835	23,809	21,039
Demand (b)					
South San Francisco District	7,304	7,240	7,398	7,777	8,216
Mid-Peninsula District	14,797	14,908	15,168	15,359	15,662
Alexandria District for Science and Technology (c)	0	0	0	0	0
Bear Gulch District	13,354	13,253	13,285	13,228	13,248
Total Potable Water Demand Inclusive of Project	35,455	35,401	35,851	36,364	37,126
Supply Shortfall (% demand)	33%	33%	34%	35%	43%



Abbreviations:

"AFY" = acre-feet per year

"BAWSCA" = Bay Area Water Supply and Conservation Agency

"Cal Water" = California Water Service

"MGD" = millions gallons per day

"SFPUC" = San Francisco Public Utilities Commission

"UWMP" = Urban Water Management Plan

Table 8
Projected Single Dry Year Water Supply and Demand
Alexandria District for Science and Technology, San Carlos, California

Notes:

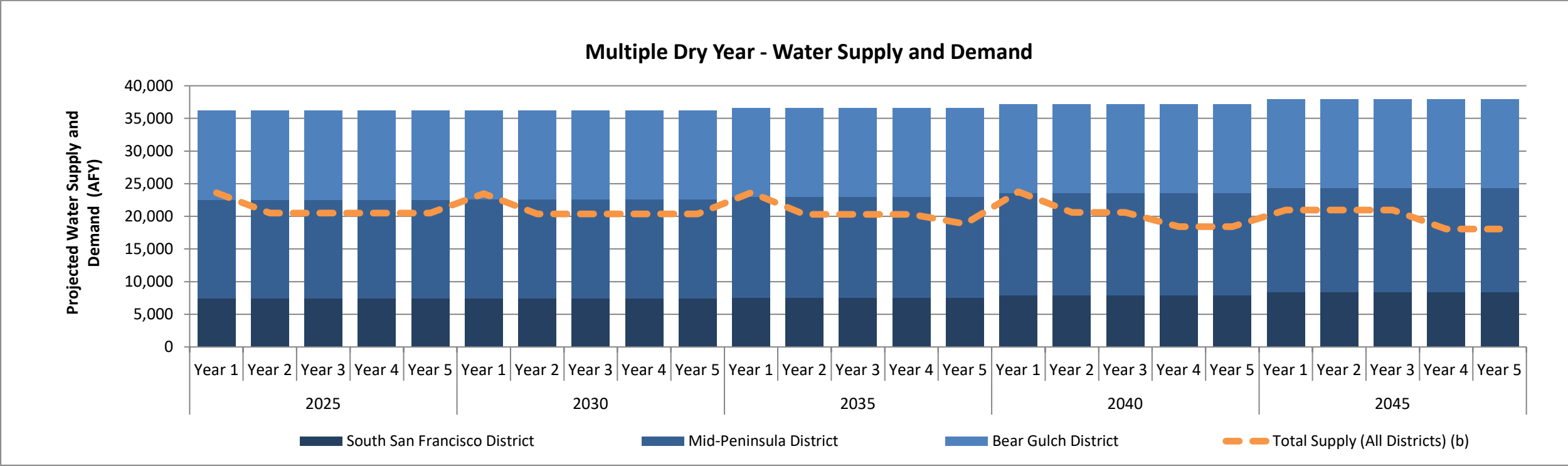
- (a) Projected supply is inclusive of supplies available for all three districts that share the same contractual allocation of water from SFPUC, per References 1-3. The projected purchase volumes are based on having full local supply (i.e., 1,534 AFY) from the South San Francisco wells. Although local surface water diversions in the Bear Gulch District (and subsequent treatment and use of local surface water) have occurred historically during dry years, the Bear Gulch District conservatively assumes that local surface water supplies will be zero during single dry and multiple dry years over the planning horizon, per Reference 3. Projected SFPUC supply is based on dry year allocation projections included in the SSF, Bear Gulch, and Mid-Peninsula District 2020 UWMPs based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC.
- (b) Cal Water updated its water demand projections for the South San Francisco, Bear Gulch, and Mid-Peninsula Districts in 2021, per References 1-3. It should be noted that the projected demands for the South San Francisco District have decreased by 527 AFY relative to those reported in the South San Francisco District 2020 UWMP because the Southline Specific Plan Project, which had previously been included in the demand projections for the South San Francisco District, is now expected to comply with the Development Offset Program and will not result in a net increase in demands.
- (c) In accordance with and through implementation of Cal Water's Development Offset Program, the Project will not result in a net increase in demands for the district.

References:

1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.
2. 2020 Urban Water Management Plan, South San Francisco District, prepared by California Water Service, dated June 2021.
3. 2020 Urban Water Management Plan, Bear Gulch District, prepared by California Water Service, dated June 2021.

Table 9
Projected Multiple Dry Year Water Supply and Demand
Alexandria District for Science and Technology, San Carlos, California

Supply Source	Projected Water Supply and Demand During Multiple Dry Years (AFY) (a)																								
	2025					2030					2035					2040					2045				
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5
Total Supply (All Districts) (b)	23,615	20,492	20,492	20,492	20,492	23,483	20,383	20,383	20,383	20,383	23,647	20,313	20,313	20,313	18,849	23,762	20,594	20,594	18,424	18,424	20,954	20,954	20,954	18,061	18,061
Demand (c)																									
South San Francisco District	7,482	7,482	7,482	7,482	7,482	7,416	7,416	7,416	7,416	7,416	7,577	7,577	7,577	7,577	7,577	7,965	7,965	7,965	7,965	7,965	8,413	8,413	8,413	8,413	8,413
Mid-Peninsula District	15,031	15,031	15,031	15,031	15,031	15,143	15,143	15,143	15,143	15,143	15,405	15,405	15,405	15,405	15,405	15,595	15,595	15,595	15,595	15,595	15,900	15,900	15,900	15,900	15,900
Alexandria District for Science and Technology (d)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear Gulch District	13,699	13,699	13,699	13,699	13,699	13,595	13,595	13,595	13,595	13,595	13,629	13,629	13,629	13,629	13,629	13,570	13,570	13,570	13,570	13,570	13,591	13,591	13,591	13,591	13,591
Total Potable Water Demand Inclusive of Project	36,212	36,212	36,212	36,212	36,212	36,154	36,154	36,154	36,154	36,154	36,611	36,611	36,611	36,611	36,611	37,130	37,130	37,130	37,130	37,130	37,904	37,904	37,904	37,904	37,904
Supply Shortfall (% demand)	35%	43%	43%	43%	43%	35%	44%	44%	44%	44%	35%	45%	45%	45%	49%	36%	45%	45%	50%	50%	45%	45%	45%	52%	52%



Abbreviations:

"AFY" = acre-feet per year
"BAWSCA" = Bay Area Water Supply and Conservation Agency
"Cal Water" = California Water Service
"MGD" = millions gallons per day
"SFPUC" = San Francisco Public Utilities Commission
"UWMP" = Urban Water Management Plan
"WSA" = Water Supply Assessment

Table 9
Projected Multiple Dry Year Water Supply and Demand
Alexandria District for Science and Technology, San Carlos, California

Notes:

- (a) While WSA regulations only require an analysis of a three-year drought scenario, UWMP regulations were updated in 2018 to include a five-year drought scenario (California Water Code §10635), Therefore, a five-year drought scenario is presented here.
- (b) Projected supply is inclusive of supplies available for all three districts that share the same contractual allocation of water from SFPUC, per References 1-3. The projected purchase volumes are based on having full local supply (i.e., 1,534 AFY) from the South San Francisco wells. Although local surface water diversions in the Bear Gulch District (and subsequent treatment and use of local surface water) have occurred historically during dry years, the Bear Gulch District conservatively assumes that local surface water supplies will be zero during single dry and multiple dry years over the planning horizon, per Reference 3. Projected SFPUC supply is based on dry year allocation projections included in the SSF, Bear Gulch, and Mid-Peninsula District 2020 UWMPs based on the methodology, assumptions and information utilized and provided by SFPUC and BAWSCA; however, actual future supply allocations may vary based on actual shortage levels and the then-applicable allocation methodology being applied by BAWSCA and SFPUC.
- (c) Cal Water updated its water demand projections for the South San Francisco, Bear Gulch, and Mid-Peninsula Districts in 2021, per References 1-3. It should be noted that the projected demands for the South San Francisco District have decreased by 527 AFY relative to those reported in the South San Francisco District 2020 UWMP because the Southline Specific Plan Project, which had previously been included in the demand projections for the South San Francisco District, is now expected to comply with the Development Offset Program and will not result in a net increase in demands.
- (d) In accordance with and through implementation of Cal Water's Development Offset Program, the Project will not result in a net increase in demands for the district.

References:

- 1. 2020 Urban Water Management Plan, Mid-Peninsula District, prepared by California Water Service, dated June 2021.
- 2. 2020 Urban Water Management Plan, South San Francisco District, prepared by California Water Service, dated June 2021.
- 3. 2020 Urban Water Management Plan, Bear Gulch District, prepared by California Water Service, dated June 2021.

7 COMPARISON OF SUPPLY AND DEMAND

Water Code Section 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.

Pursuant to CWC §10910c(3), this WSA must include an estimate of the projected water supplies available to the Mid-Peninsula District under normal, single dry, and multiple dry years, and a discussion of whether those supplies will meet the projected demand associated with the proposed Project, in addition to the water system's existing and planned future uses. This assessment is parallel to the multiple-dry year supply reliability analysis required for UWMPs under CWC §10635. In 2018, CWC §10635 was revised to require UWMPs to extend this analysis to consider “a drought lasting five consecutive water years.” Although CWC §10910c(3) has not yet been updated to require this for WSAs, a five-year drought scenario is also evaluated herein. However, as discussed in Section 4.1, with the implementation of Cal Water's Development Offset Program, the proposed Project is not expected to result in a net increase in water demands to the Mid-Peninsula District.

Tables 7 through **9** provide a comparison of the demands and supplies in normal year, single-dry year, and multiple-dry year hydrologic scenarios for the three Peninsula Districts. It is projected that available water supplies will be sufficient to meet the demands under normal year hydrologic conditions through 2045, inclusive of the proposed Project. However, in drought periods, shortfalls of up to 52% are possible if, as discussed above, the “worst-case” supply scenario is realized in which the Bay-Delta Plan Amendment is implemented as written, and not accounting for implementation of SFPUC's AWSP. As discussed in Section 6.1.1.4, Cal Water is working independently and with the other BAWSCA agencies to identify regional mitigation measures to improve reliability for regional and local water supplies and meet its customers' water needs. As a result, Cal Water expects that SFPUC's LOS Goals and Objectives will be met and is comfortable assuming its contract with SFPUC will be honored as written. Thus, any dry year shortfalls would be expected to be lower than those shown in **Tables 8** and **9**.

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

On 24 May 2022, in response to Governor Newsom's Executive Order N-7-22 and calls for water conservation from the SWRCB, the SFPUC entered into Level 2 of its WSCP, resulting in a voluntary water use reduction of 11%. The RWS has historically met demand in its service area in

all year types, and prior to 2021, only called for voluntary 10% rationing during 2007 to 2009 and 2014 to 2015. Although the Mid-Peninsula District has not experienced any shortage of RWS deliveries, during the recent drought, it was subject to the SWRCB's mandatory water reduction target at 16% between June 2015 and May 2016.¹¹ During this period, the Mid-Peninsula District surpassed its reduction targets in each month and achieved an average water demand reduction of 24% compared to its water use in 2013 (SWRCB, 2016). The South San Francisco and Bear Gulch Districts were required to reduce water use by 8% and 36%, respectively, and through May 2016 exceeded their targets with cumulative reductions of 20% and 37%, respectively (SWRCB, 2016).

While RWS reliability is constrained by hydrology, physical facilities, institutional parameters including state and federal regulations, the SFPUC is implementing both capital improvement and planning processes to identify potential new water supplies and demand management actions to enhance RWS reliability and meet its contractual commitment to Wholesale Customers through 2045. Within and outside the RWS, Cal Water and other Wholesale Customers are also leading multiple efforts to develop additional water supply for its member agencies through implementation of its Long-Term Water Supply Reliability Strategy.

Cal Water is also striving to increase the water supply portfolio for the three Peninsula Districts through: (1) investment in water conservation, (2) participation in the RGSF Project and the regional water recycling project (i.e., PREP), and (3) development of a regional water supply reliability study using integrated resource planning practices to create a long-term supply reliability strategy through 2050, among other things as described in the 2020 UWMPs for each District. As described above, these three Peninsula Districts share access to Cal Water's SFPUC supply and, as such, any supply added to one of these districts will benefit the others.

¹¹ On 5 May 2015, the SWRCB adopted Resolution 2015-0032 that mandates minimum actions by water suppliers and their customers to conserve water supplies into 2016 and assigned a mandatory water conservation goal to each water supplier based on their R-GPCD. The Resolution was adopted pursuant to Executive Order B-29-15 that directed SWRCB to impose mandatory restrictions on urban water suppliers to achieve a statewide 25% reduction in potable urban water usage to address California's severe drought conditions. Based on its R-GPCD, the Mid-Peninsula District was required to reduce water use by 16% relative to its 2013 water use. The South San Francisco and Bear Gulch Districts were required to reduce water use by 8% and 36%, respectively. All three Peninsula Districts exceeded their mandatory savings targets by May 2016.

8 CONCLUSIONS

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

As described in Section 4, the water demand of the proposed Project (i.e., 200 AFY at buildout) has been conservatively estimated, and as discussed in Section 4.1, with implementation of Cal Water's Development Offset Program, the proposed Project is not expected to result in a net increase in water demands to Cal Water's Mid-Peninsula District.

It should be noted that if the "worst-case" supply scenario described under Section 6.1.1.2 in which the Bay-Delta Plan Amendment is implemented as written and not accounting for the implementation of actions identified as part of SFPUC's AWSP, BAWSCA's Long-Term Water Supply Reliability Strategy, or Cal Water's Water Supply Reliability Study, shortfalls of up to 52% are projected during drought years. However, as described in Section 6.1.1, Cal Water expects that SFPUC's LOS Goals will be met and is assuming its contract with SFPUC will be honored as written. If drought conditions should arise, Cal Water will meet its demands through the implementation of its WSCP, as described in Section 7. In addition, Cal Water, through local and regional efforts, is striving to increase its water supply portfolio for the Mid-Peninsula District and the other two Peninsula Districts.

This WSA concludes that, through supply augmentation or demand management measures equal to the Project's estimated net new demands consistent with Cal Water's Development Offset Program, the proposed Project will not affect water supply reliability within the Mid-Peninsula District. Based on currently available information and conservative estimates of projected demand, Cal Water expects to be able to meet all future demands within its existing Mid-Peninsula District service area (as well as the South San Francisco and Bear Gulch Districts), inclusive of the proposed Project in normal hydrologic years. The shortfalls that are currently projected during dry years will be addressed through planned implementation of the Mid-Peninsula District WSCP. In addition, as described herein and in Cal Water's 2020 UWMP, BAWSCA, Cal Water, and SFPUC are pursuing the development of additional water supplies to improve the RWS and Mid-Peninsula District supply reliability.

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Appendix A

Documentation of Water Supply Agreements (excluding attachments)

**AMENDED AND RESTATED
WATER SUPPLY AGREEMENT
between
THE CITY AND COUNTY OF SAN FRANCISCO
and
WHOLESALE CUSTOMERS
in
ALAMEDA COUNTY, SAN MATEO COUNTY AND
SANTA CLARA COUNTY**

NOVEMBER 2018

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AMENDED AND RESTATED

WHOLESALE WATER SUPPLY AGREEMENT

Introductory Statement

Both San Francisco, as the Regional Water System owner and operator, and its Wholesale Customers share a commitment to the Regional Water System providing a reliable supply of high quality water at a fair price, and achieving these goals in an environmentally sustainable manner.

Article 1. Parties, Effective Date, And Defined Terms

1.01. Definitions

The capitalized terms used in this Agreement shall have the meanings set forth in Attachment A.

1.02. Parties

The parties to this Agreement are the City and County of San Francisco and such of the following entities (all of which purchase water from San Francisco) as have executed this Agreement:

Alameda County Water District
California Water Service Company
City of Brisbane
City of Burlingame
City of Daly City
City of East Palo Alto
City of Hayward
City of Menlo Park
City of Millbrae
City of Milpitas
City of Mountain View
City of Palo Alto

City of Redwood City
City of San Bruno
City of San José
City of Santa Clara
City of Sunnyvale
Coastside County Water District
Estero Municipal Improvement District
Guadalupe Valley Municipal Improvement District
Mid-Peninsula Water District
North Coast County Water District
Purissima Hills Water District
Stanford University
Town of Hillsborough
Westborough Water District

The entities listed above which have executed this Agreement shall be collectively referred to as the "Wholesale Customers."

1.03. Effective Date

A. Except as provided in subsection C, this Agreement shall become effective only when it has been approved by San Francisco and by each of the entities listed in Section 1.02 and when San Francisco and each of those entities (except for the City of Hayward) have entered into an Individual Water Sales Contract as provided in Section 9.01.

B. If San Francisco and all of the entities listed in Section 1.02 approve this Agreement and (except for the City of Hayward) an Individual Water Sales Contract on or before July 1, 2009, the effective date shall be July 1, 2009. If San Francisco and all of the entities listed in Section 1.02 approve this Agreement and (except for the City of Hayward) an Individual Water Sales Contract after July 1, 2009 but on or before September 1, 2009, the effective date shall be the date on which the last entity listed in Section 1.02 approves this Agreement and, if required, an Individual Water Sales Contract.

C. If by September 1, 2009 this Agreement has been approved by fewer than all of the entities listed in Section 1.02 or fewer than all of such entities (other than the City of Hayward) have entered into an Individual Water Sales Contract, but it has been approved by entities representing at least 75% in number and 75% of the water purchased from SFPUC by

all listed agencies during FY 2007-08 (i.e., 173.39 MGD), then San Francisco shall have the option to waive the requirement in subsection A that all listed agencies have approved this Agreement and an Individual Water Sales Contract as a condition precedent to this Agreement and any Individual Water Sales Contract becoming effective. San Francisco shall have 60 days from September 1, 2009 (i.e., until October 31, 2009) within which to decide whether or not to waive the condition. If San Francisco decides to waive the condition, those listed agencies that have approved this Agreement and Individual Water Sales Contract before October 31, 2009 will be bound thereby and this Agreement and Individual Water Sales Contracts will become effective as to them, as of the date of San Francisco's waiver. For purposes of determining whether listed agencies that have approved this Agreement represent at least 75% of the water purchased during FY 2007-08, the quantity of water attributable to each listed entity shall be as set forth on Attachment B.

D. The provisions of Article 9 that apply to fewer than all Wholesale Customers (i.e., Sections 9.02 - 9.07) shall not become effective unless San Francisco and the entity to which the section applies have each approved (1) this Agreement, and (2) the underlying Individual Water Sales Contract, unless otherwise provided in Article 9. This provision does not affect the continued enforceability of provisions in those sections that derive from independently enforceable judgments, orders or agreements.

Article 2. Term; Amendments During Term

2.01. Term

The term ("Term") of this Agreement shall be twenty five (25) years. The Term shall begin on July 1, 2009, regardless of whether the Effective Date is before or after that date, and shall end on June 30, 2034. Except as provided in Article 9, the term of all Individual Water Sales Contracts shall also begin on July 1, 2009 and end on June 30, 2034.

2.02. Extension and Renewal of Term

A. In December 2031, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of this Agreement. Between January 1, 2032 and June 30, 2032, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2032 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2030-31, the Term shall be extended for another five (5) years ("First Extension Term"), through June 30, 2039. No party to this Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties under this section.

B. In December 2036, the SFPUC may provide written notice to the Wholesale Customers that it is willing to extend the Term of this Agreement. Between January 1, 2037 and June 30, 2037, any Wholesale Customer may accept the SFPUC's offer to extend the Term by providing a written notice of extension to the SFPUC. If such notices of extension are received from Wholesale Customers representing at least two-thirds in number as of June 30, 2037 and seventy five percent (75%) of the quantity of water delivered by the SFPUC to all Wholesale Customers during fiscal year 2035-36, the Term shall be extended for another five (5) years ("Second Extension Term"), through June 30, 2044. No party to this Agreement which does not wish to remain a party during the Extension Term shall be compelled to do so by the actions of other parties under this section.

C. After the expiration of the Term, and, if applicable, the Extension Terms, this Agreement may be renewed by mutual consent of the parties, subject to any modifications thereof which may be determined at that time. If fewer than all of the parties desire to renew this Agreement beyond its Term, with or without modifications, the SFPUC and the Wholesale

Customers who wish to extend the Agreement shall be free to do so, provided that no party to this Agreement which does not wish to become a party to such a renewed Agreement shall be compelled to do so by the actions of other parties under this section.

2.03. Amendments

A. Amendments to Agreement; General

1. This Agreement may be amended with the written consent of all parties.
2. This Agreement may also be amended with the written consent of San Francisco and of Wholesale Customers representing at least two-thirds in number (i.e., 18 as of July 1, 2009) and seventy five percent (75%) of the quantity of water delivered by San Francisco to all Wholesale Customers during the fiscal year immediately preceding the amendment.
3. No amendment which adversely affects a Fundamental Right of a Wholesale Customer may be made without the written consent of that customer. Amendments to Article 5 which merely affect the allocation of costs between City Retail customers on the one hand and Wholesale Customers collectively on the other, and amendments to Articles 6 and 7 which merely alter budgetary, accounting and auditing procedures do not affect Fundamental Rights and may be made with the consent of parties meeting the requirements of Section 2.03.A.2.
4. When an amendment has been approved by San Francisco and the number of Wholesale Customers required in Section 2.03.A.2, San Francisco shall notify each of the Wholesale Customers in writing of the amendment's adoption. Notwithstanding any provision of law or this Agreement, any Wholesale Customer that claims that the amendment violates its Fundamental Rights under Section 2.03.A.3, shall have 30 days from the date San Francisco delivers the notice of its adoption in which to challenge the amendment's validity through a judicial action. If no such action is filed within 30 days, the amendment shall be finally and conclusively deemed to have been adopted in compliance with this section.

B. Amendments to Article 9

1. Notwithstanding the provisions of Sections 2.03.A.2 and 2.03.A.3, any provision of Article 9 which applies only to an individual Wholesale Customer may be amended with the written concurrence of San Francisco and the Wholesale Customer to which it applies;

provided that the amendment will not, directly or indirectly, adversely affect the Fundamental Rights of the other Wholesale Customers.

2. Before making any such amendment effective, San Francisco shall give notice, with a copy of the text of the proposed amendment, to all other Wholesale Customers. The Wholesale Customers shall have 30 days in which to object to the amendment on the ground that it is not permissible under this subsection. If no such objection is received by San Francisco, the proposed amendment shall become effective. If one or more Wholesale Customers object to the amendment, San Francisco, the individual Wholesale Customer with which San Francisco intends to effect the amendment, and the Wholesale Customer(s) which lodged the objection shall meet to discuss the matter.

3. If the dispute cannot be resolved and San Francisco and the Wholesale Customer involved elect to proceed with the amendment, either San Francisco or the Wholesale Customer shall give written notice of such election to each Wholesale Customer that has objected. Any Wholesale Customer that has objected to such amendment shall have 30 days from receipt of this notice within which to commence an action challenging the validity of such amendment, and such amendment shall be deemed effective as of the end of this 30-day period unless restrained by order of court.

C. **Amendments to Attachments.** The following attachments may be amended with the written concurrence of San Francisco and BAWSCA on behalf of the Wholesale Customers:

<u>Attachment</u>	<u>Name</u>
G	January 2006 Water Quality Notification and Communications Plan
J	Water Use Measurement and Tabulation
L-1	Identification of WSIP Projects as Regional/Retail
N-1	Balancing Account/Rate Setting Calculation Table
N-2	Wholesale Revenue Requirement Schedules
N-3	Schedule of Projected Water Sales, Wholesale Revenue Requirement and Wholesale Rates
P	Management Representation Letter

R Classification of Existing System Assets (subject to Section 5.11)

Amendments to these attachments shall be approved on behalf of San Francisco by the Commission and on behalf of BAWSCA by its Board of Directors, unless the Commission by resolution delegates such authority to the General Manager of the SFPUC or the Board of Directors by resolution delegates such authority to the General Manager/CEO of BAWSCA.

D. **Amendments to Individual Water Sales Contracts.** Individual Water Sales Contracts described in Section 9.01 may be amended with the written concurrence of San Francisco and the Wholesale Customer which is a party to that Individual Water Sales Contract; provided that the amendment is not inconsistent with this Agreement or in derogation of the Fundamental Rights of other Wholesale Customers under this Agreement.

Article 3. Water Supply

3.01. Supply Assurance

A. San Francisco agrees to deliver water to the Wholesale Customers up to the amount of the Supply Assurance. The Supply Assurance is for the benefit of the entities listed in Section 1.02, irrespective of whether or not they have executed this Agreement. Water delivered by San Francisco to Retail Customers shall not be included in the Supply Assurance. Until December 31, 2018, the foregoing commitment is subject to Article 4.

B. Both the Supply Assurance and the Individual Supply Guarantees identified in Section 3.02 are expressed in terms of daily deliveries on an annual average basis and do not themselves constitute a guarantee by San Francisco to meet peak daily or hourly demands of the Wholesale Customers, irrespective of what those peak demands may be. The parties acknowledge, however, that the Regional Water System has been designed and constructed to meet peak daily and hourly demands and that its capacity to do so has not yet been reached. San Francisco agrees to operate the Regional Water System to meet peak requirements of the Wholesale Customers to the extent possible without adversely affecting its ability to meet peak demands of Retail Customers. This Agreement shall not preclude San Francisco from undertaking to meet specific peak demand requirements of individual Wholesale Customers in their Individual Water Sales Contracts.

C. The Supply Assurance is perpetual and shall survive the expiration or earlier termination of this Agreement. Similarly, the Individual Supply Guarantees identified in Section 3.02 and/or the Individual Water Sales Contracts are perpetual and shall survive the expiration or earlier termination of this Agreement or the Individual Water Sales Contracts.

D. Notwithstanding the Supply Assurance established by this section, the Individual Supply Guarantees identified in Section 3.02 and the Individual Water Sales Contracts, the amount of water made available by San Francisco to the Wholesale Customers is subject to reduction, to the extent and for the period made necessary by reason of water shortage, Drought, Emergencies, or by malfunctioning or rehabilitation of facilities in the Regional Water System. Any such reduction will be implemented in accordance with Section 3.11. The amount of water made available to the Wholesale Customers may not be reduced, however, merely because the water recycling and groundwater projects which the WSIP envisions to be constructed within San Francisco, or the conservation programs intended to reduce water use

by Retail Customers that are included in the WSIP, do not generate the yield or savings (10 MGD combined) anticipated by San Francisco.

3.02. Allocation of Supply Assurance

A. Pursuant to Section 7.02 of the 1984 Agreement, a portion of the Supply Assurance has been allocated among 24 of the 26 Wholesale Customers. These Individual Supply Guarantees are also expressed in terms of annual average metered deliveries of millions of gallons per day and are listed in Attachment C.

B. Three Wholesale Customers do not have Individual Supply Guarantees. The cities of San Jose and Santa Clara do not have an Individual Supply Guarantees because San Francisco has provided water to them on a temporary and interruptible basis as described in Sections 4.05 and 9.06. The City of Hayward does not have an Individual Supply Guarantee because of the terms of the 1962 contract between it and San Francisco, as further described in Section 9.03.

C. If the total amount of water delivered by San Francisco to Hayward and to the Wholesale Customers that are listed on Attachment C exceeds 184 MGD over a period of three consecutive fiscal years (i.e., July 1 through June 30), then the Individual Supply Guarantees of those Wholesale Customers listed on Attachment C shall be reduced pro rata so that their combined entitlement and the sustained use by Hayward does not exceed 184 MGD. The procedure for calculating the pro rata reduction in Individual Supply Guarantees is set out in Attachment D.

1. The provisions of this subsection C are not in derogation of the reservation of claims to water in excess of the Supply Assurance which are contained in Section 8.07. Nor do they constitute an acknowledgement by Wholesale Customers other than Hayward that San Francisco is obligated or entitled to reduce their Individual Supply Guarantees in the circumstances described herein. The provisions of this subsection C shall, however, be operative unless and until a court determines that its provisions violate rights of the Wholesale Customers derived independently of this Agreement.

2. The foregoing paragraph is not intended to and shall not constitute a contractual commitment on the part of San Francisco to furnish more water than the Supply Assurance to the Wholesale Customers or a concession by San Francisco that the provisions of this subsection violate any rights of the Wholesale Customers.

D. Notwithstanding the reservation of claims contained in Sections 3.02.C and 8.07, it shall be the responsibility of each Wholesale Customer to limit its purchases of water from San Francisco so as to remain within its Individual Supply Guarantee. San Francisco shall not be liable to any Wholesale Customer or be obligated to supply more water to any Wholesale Customer individually or to the Wholesale Customers collectively than the amount to which it or they are otherwise entitled under this Agreement due to the use by any Wholesale Customer of more water than the amount to which it is entitled under this Agreement.

E. San Francisco shall install such new connections between the Regional Water System and the distribution system of any Wholesale Customer that are necessary to deliver the quantities of water to which the Wholesale Customer is entitled under this Agreement. San Francisco shall have the right to determine the location of such connections, in light of the need to maintain the structural integrity of the Regional Water System and, where applicable, the need to limit peaking directly off of Regional Water System pipelines by a Wholesale Customer's individual retail customers, the need to ensure that a Wholesale Customer's individual retail customers have access to alternative sources of water in the event of a reduction in San Francisco's ability to provide them with water, and other factors which may affect the desirability or undesirability of a particular location. San Francisco's decisions regarding the location of new connections and the location, size and type of any new meters shall not be reviewable by a court except for an abuse of discretion or failure to provide a Wholesale Customer with connections and meters adequate to deliver the quantity of water to which it is entitled under this Agreement.

3.03. Wholesale Customer Service Areas

A. Each of the Individual Water Sales Contracts described in Section 9.01 will contain, as an exhibit, a map of the Wholesale Customer's service area. A Wholesale Customer may not deliver water furnished to it by San Francisco outside the boundary of its service area without the prior written consent of San Francisco, except for deliveries to another Wholesale Customer on an emergency and temporary basis pursuant to Section 3.07.B.

B. If a Wholesale Customer wishes to expand its service area, it shall request San Francisco's consent to the expansion and provide information reasonably requested by San Francisco about the amount of water projected to be purchased from San Francisco to meet demand within the area proposed to be added to the service area.

C. San Francisco may refuse a Wholesale Customer's request to expand its service area on any reasonable basis. If San Francisco denies a request by a Wholesale Customer to expand its service area, or fails to act on the request for six months after it has been submitted, the Wholesale Customer may challenge San Francisco's denial or delay in court. Such a challenge may be based on the Wholesale Customers' claim, reserved in Section 8.07, that San Francisco is obligated under federal or state law to furnish water, included within its Individual Supply Guarantee, to it for delivery outside its then-existing service area and that it is entitled to enlarge its service area to supply water to such customers. San Francisco reserves the right to contest any such claim on any applicable ground. This subsection does not apply to San Jose and Santa Clara, whose maximum service areas are fixed pursuant to Section 9.06.

D. This section will not prevent San Francisco and any Wholesale Customer, other than San Jose and Santa Clara, from agreeing in an Individual Water Sales Contract or an amendment thereto that:

- the Wholesale Customer may expand its service area without subsequent San Francisco approval to a definitive size but no larger, or
- the Wholesale Customer will not expand its service area beyond its present limits without San Francisco approval

and waiving the provisions of this section with respect to any additional expansion.

E. If two or more Wholesale Customers agree to adjust the boundaries of their respective service areas so that one assumes an obligation to serve customers in an area that was previously within the service area of another Wholesale Customer, they may also correspondingly adjust their respective Individual Supply Guarantees. Such adjustments are not subject to the requirements of Section 3.04 and shall require only the consent of San Francisco and the Wholesale Customers involved, so long as the Supply Assurance and the Individual Supply Guarantees of other Wholesale Customers are not affected. Service area boundary adjustments that would result in the expansion of any California Water Service Company service areas are subject to the requirements of Section 9.02.D. Any adjustment of service area boundaries that would result in the supply of water in violation of this Agreement or the Act shall be void.

F. San Francisco acknowledges that it has heretofore consented in writing to deliveries of water by individual Wholesale Customers outside their service area boundaries and

agrees that nothing in this Agreement is intended to affect such prior authorizations, which remain in full force and effect according to their terms. Such authorizations shall be identified in the Individual Water Sales Contracts.

3.04. Permanent Transfers of Individual Supply Guarantees

A. A Wholesale Customer that has an Individual Supply Guarantee may transfer a portion of it to one or more other Wholesale Customers, as provided in this section.

B. Transfers of a portion of an Individual Supply Guarantee must be permanent. The minimum quantity that may be transferred is 1/10th of a MGD.

C. Transfers of portions of Individual Supply Guarantees are subject to approval by the SFPUC. SFPUC review is limited to determining (1) whether a proposed transfer complies with the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee.

D. The participants in a proposed transfer shall provide notice to the SFPUC specifying the amount of the Individual Supply Guarantee proposed to be transferred, the proposed effective date of the transfer, which shall not be less than 60 days after the notice is submitted to the SFPUC, and the Individual Supply Guarantees of both participants resulting from the transfer. The SFPUC may require additional information reasonably necessary to evaluate the operational impacts of the transfer. The SFPUC will not unreasonably withhold or delay its approval; if the SFPUC does not act on the notice within 60 days, the transfer will be deemed to have been approved.

E. Within 30 days after the transfer has become effective, both the transferor and the transferee will provide notice to the SFPUC and BAWSCA. By September 30 of each year during the Term, the SFPUC and BAWSCA will prepare an updated Attachment C to reflect transfers occurring during the immediately preceding fiscal year.

F. Amounts transferred will remain subject to pro rata reduction under the circumstances described in Section 3.02.C and according to the formula set forth in Attachment D.

3.05. Restrictions on Resale

Each Wholesale Customer agrees that it will not sell any water purchased from San Francisco to a private party for resale by such private party to others in violation of the Act.

Each Wholesale Customer also agrees that it will not sell water purchased from San Francisco to another Wholesale Customer without prior written approval of the SFPUC, except on a temporary and emergency basis as permitted in Section 3.07.B.2. The SFPUC agrees that it will not unreasonably withhold its consent to a request by a Wholesale Customer to deliver water to another Wholesale Customer for resale.

3.06. Conservation; Use of Local Sources; Water Management Charge

A. In order to support the continuation and expansion of water conservation programs, water recycling, and development of alternative supplies within the Wholesale Customers' service areas, the SFPUC will, if requested by BAWSCA, include the Water Management Charge in water bills sent to Wholesale Customers. The SFPUC will deliver all Water Management Charge revenue to BAWSCA monthly and shall deliver an annual accounting of Water Management Charge revenue to BAWSCA within 90 days after the end of each fiscal year. The SFPUC's obligations to collect and deliver Water Management Charge revenue to BAWSCA under this subsection are conditioned on BAWSCA's delivery to the SFPUC of an annual report describing the projects and programs on which Water Management Charge funds received from the SFPUC during the previous fiscal year were expended and an estimate of the amount of water savings attributable to conservation programs and of the yield of alternative supplies developed. This report will be due within 180 days after the end of each fiscal year during which Water Management Charge funds were received.

B. The SFPUC will work together with BAWSCA to explore ways to support water conservation programs, recycling projects, and conjunctive use alternatives outside the Wholesale Service Area, in particular projects and programs that have the potential to increase both flows in the lower Tuolumne River (downstream of New Don Pedro Reservoir) and water deliveries to the Regional Water System.

C. Each Wholesale Customer shall take all actions within its legal authority related to water conservation that are necessary to insure that the SFPUC (a) remains eligible for (i) state and federal grants and (ii) access to the Drought Water Bank operated by the California Department of Water Resources, as well as other Drought-related water purchase or transfer

programs, and (b) complies with future legal requirements imposed on the Regional Water System by the federal government, the State, or any other third party as conditions for receiving funding or water supply.

D. San Francisco and each Wholesale Customer agree that they will diligently apply their best efforts to use both surface water and groundwater sources located within their respective service areas and available recycled water to the maximum feasible extent, taking into account the environmental impacts, the public health effects and the effects on supply reliability of such use, as well as the cost of developing such sources.

3.07. Restrictions on Purchases of Water from Others; Minimum Annual Purchases

A. Each Wholesale Customer (except for Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale) agrees that it will not contract for, purchase or receive, with or without compensation, directly or indirectly, from any person, corporation, governmental agency or other entity, any water for delivery or use within its service area without the prior written consent of San Francisco.

B. The prohibition in subsection A does not apply to:

1. recycled water;
2. water necessary on an emergency and temporary basis, provided that the Wholesale Customer promptly gives San Francisco notice of the nature of the emergency, the amount of water that has been or is to be purchased, and the expected duration of the emergency; or
3. water in excess of a Wholesale Customer's Individual Supply Guarantee.

C. Alameda County Water District and the cities of Milpitas, Mountain View and Sunnyvale may purchase water from sources other than San Francisco, provided that San Francisco shall require that each purchase a minimum annual quantity of water from San Francisco. These minimum quantities are set out in Attachment E and shall also be included in the Individual Water Sales Contracts between San Francisco and each of these four Wholesale Customers. The minimum purchase requirement in these Individual Water Sales Contracts will be waived during a Drought or other period of water shortage if the water San Francisco makes available to these Wholesale Customers is less than its minimum purchase quantity.

3.08. Water Quality

A. San Francisco shall deliver treated water to Wholesale Customers (except Coastside County Water District, which receives untreated water from Crystal Springs and Pilarcitos Reservoirs) that complies with primary maximum contaminant level and treatment technique standards at the regulatory entry points designated in the San Francisco Regional Water System Domestic Water Supply Permit (currently Permit No. 02-04-04P3810001) issued by the California Department of Public Health (CDPH).

B. San Francisco will provide notice to the Wholesale Customers in accordance with the Water Quality Notification and Communications Plan (current version dated January 2006), attached hereto as Attachment G. San Francisco will regularly update its plan in consultation with the Wholesale Customers and the CDPH. The next update will be completed one year after the Effective Date and include expanded coverage of secondary maximum contaminant level exceedances and water quality communication triggers. The plan will note that the Wholesale Customers will receive the same notification no later than the San Francisco water system (currently Permit No. 02-04-01P3810011) except for distribution-related issues.

C. San Francisco and the Wholesale Customers will establish a Water Quality Committee. The Water Quality Committee will meet at least quarterly to collaboratively address water quality issues, such as Water Quality Notification and Communications Plan updates, regulatory issues, and water quality planning studies/ applied research. San Francisco and each Wholesale Customer will designate a representative to serve on the committee. There will be a Chair and Vice Chair position for the Water Quality Committee. The Chair and Vice Chair positions will be held by San Francisco and the Wholesale Customers and rotate between them on an annual basis.

3.09. Completion of WSIP

San Francisco will complete construction of the physical facilities in the WSIP by December 30, 2021. The SFPUC agrees to provide for full public review and comment by local and state interests of any proposed changes that delay previously adopted project completion dates or that delete projects. The SFPUC shall meet and consult with BAWSCA before proposing to the Commission any changes in the scope of WSIP projects which reduce their capacity or ability to achieve adopted Level of Service Goals and Objectives. The SFPUC

retains discretion to determine whether to approve the physical facilities in the WSIP until after it completes the CEQA process as set forth in Section 4.07.

3.10. Regional Water System Repair, Maintenance and Operation

A. San Francisco will keep the Regional Water System in good working order and repair consistent with prudent utility practice.

B. San Francisco will submit reports to its Retail and Wholesale Customers on the "State of the Regional Water System," including reports on completed and planned maintenance, repair or replacement projects or programs, by September of every even-numbered year, with reports to start in September 2010.

C. San Francisco will cooperate with any audit of the SFPUC's asset management practices that may be initiated and financed by BAWSCA or the Wholesale Customers. BAWSCA may contract with third parties to conduct the audits. San Francisco will consider the findings and recommendations of such audits and will provide a written response indicating agreement with the recommendations, or disagreement with particular recommendations and the reasons why, within 90 calendar days after receipt.

D. San Francisco will continue to operate its reservoirs in a manner that assigns higher priority to the delivery of water to the Bay Area and the environment than to the generation of electric power. The SFPUC, as the Regional Water System operator, is solely responsible for making day-to-day operational decisions.

3.11. Shortages

A. **Localized Water Reductions.** Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers individually, San Francisco may reduce the amount of water available or interrupt water deliveries to specific geographical areas within the Regional Water System service area to the extent that such reductions are necessary due to Emergencies, or in order to install, repair, rehabilitate, replace, investigate or inspect equipment in, or perform other maintenance work on, the Regional Water System. Such reductions or interruptions may be imposed by San Francisco without corresponding reductions or interruptions in the amount of water available to SFPUC water users outside the specific geographical area where reductions or interruptions are necessary, if the system's ability to supply water outside the specific geographical area has not been impaired. In the event of such

a reduction or interruption, San Francisco will restore the supply of water to the specific geographical area as soon as is possible. Except in cases of Emergencies (during which oral notice shall be sufficient), San Francisco will give the affected Wholesale Customer(s) reasonable written notice of such localized reductions or interruptions, the reasons therefor, and the probable duration thereof.

B. System-Wide Shortages and SFPUC Response to Regional Emergencies.

Following a major system emergency event, the SFPUC will work closely with its Wholesale Customers to monitor customer demand, including the demand source. In the event that any individual Wholesale Service Area or Retail Service Area customer's uncontrolled distribution system leaks could result in major water waste and endanger the supply provided by the Regional Water System as a whole, flow through some customer connections may need to be temporarily reduced or terminated. SFPUC will work closely with customers to assess the nature of the demand (e.g. fire-fighting versus leakage), so that public health and safety protection can be given top priority.

1. All emergencies that require use of non-potable source water will require use of chlorine, or other suitable disinfectant, if feasible.
2. San Francisco will use its best efforts to meet the seismic reliability and delivery reliability Level of Service Goals and Objectives adopted by the Commission in conjunction with the WSIP. San Francisco will distribute water on an equitable basis throughout the Regional Water System service area following a regional Emergency, subject to physical limitations caused by damage to the Regional Water System.
3. San Francisco's response to Emergencies will be guided by the then-current version of the ERRP. The SFPUC shall periodically review, and the Commission may amend, the ERRP to ensure that it remains an up-to-date and effective management tool.
4. The SFPUC will give the Wholesale Customers notice of any proposal to amend the ERRP in a manner that would affect them. The notice will be delivered at least thirty days in advance of the date on which the proposal is to be considered by the Commission and will be accompanied by the text of the proposed amendment.

C. Shortages Caused by Drought: Acquisition of Dry Year Supplies.

Notwithstanding San Francisco's obligations to deliver the Supply Assurance to the Wholesale Customers collectively and the Individual Supply Guarantees to Wholesale Customers

individually, San Francisco may reduce the amount of water available to the Wholesale Customers in response to Drought.

1. The Tier 1 Shortage Plan (Attachment H) will continue to be used to allocate water from the Regional Water System between Retail and Wholesale Customers during system-wide shortages of 20% or less.

2. San Francisco and the Wholesale Customers may negotiate in good faith revisions to the Tier 1 Shortage Plan to adjust for and accommodate anticipated changes due to demand hardening in the SFPUC's Wholesale and Retail Service Areas. Until agreement is reached, the current Tier 1 Shortage Plan will remain in effect.

3. The SFPUC will honor allocations of water among the Wholesale Customers ("Tier 2 Allocations") provided by BAWSCA or if unanimously agreed to by all Wholesale Customers. If BAWSCA or all Wholesale Customers do not provide the SFPUC with Tier 2 Allocations, then the SFPUC may make a final allocation decision after first meeting and discussing allocations with BAWSCA and the Wholesale Customers. For Regional Water System shortages in excess of 20%, San Francisco shall (a) follow the Tier 1 Shortage Plan allocations up to the 20% reduction, (b) meet and discuss how to implement incremental reductions above 20% with the Wholesale Customers, and (c) make a final determination of allocations above the 20% reduction. After the SFPUC has made the final allocation decision, the Wholesale Customers shall be free to challenge the allocation on any applicable legal or equitable basis.

4. San Francisco will use its best efforts to identify potential sources of dry year water supplies and establish the contractual and other means to access and deliver those supplies in sufficient quantity to meet a goal of not more than 20 percent system-wide shortage in any year of the design drought.

5. San Francisco will cooperate with BAWSCA to improve water supply reliability. As an example of such cooperation, San Francisco may invite a representative of BAWSCA to attend and participate in meetings with third parties for development of dry year water supplies. If San Francisco does not invite a BAWSCA representative to attend a specific scheduled meeting, it will promptly (within 30 days of any such meeting) provide BAWSCA with a written or oral report on the meeting, including any decisions reached at it, as well as information about planned subsequent meetings. Progress in securing dry year water supplies

will be reported to the SFPUC and the BAWSCA board of directors during the first quarter of each calendar year.

3.12. Wheeling of Water from Outside SFPUC System

Subject to the Wheeling Statute, the SFPUC will not deny use of Regional Water System unused capacity for wheeling when such capacity is available for wheeling purposes during periods when the SFPUC has declared a water shortage emergency under Water Code Section 350 if the following conditions are met:

A. The transferor pays reasonable charges incurred by the SFPUC as a result of the wheeling, including capital, operation, maintenance, administrative and replacement costs (as such are defined in the Wheeling Statute).

B. Wheeled water that is stored in the Regional Water System spills first.

C. Wheeled water will not unreasonably: (1) impact fish and wildlife resources in Regional Water System reservoirs; (2) diminish the quality of water delivered for consumptive uses; or (3) increase the risk of exotic species impairing Regional Water System operations. The transferor may at its own expense provide for treatment to mitigate these effects.

D. Priority will be given to wheeling by Wholesale Customers or BAWSCA over arrangements for third-party public entities.

3.13. Limits on New Customers

A. **New Wholesale Customers Prior to December 31, 2028.** Until December 31, 2028, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations as provided in Section 4.07;

2. It concurrently completes any necessary environmental review under CEQA as provided in Section 4.07 and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD; and

3. This Agreement is amended to incorporate any commitments to proposed new wholesale customers and to San Jose and Santa Clara, and to address the effects, if any,

of the new customer(s) on water supply reliability, water quality and cost to existing customers of the Regional Water System.

B. **New Wholesale Customers After December 31, 2028.** As of January 1, 2029, San Francisco will not enter into contracts to supply water to any entity other than a Wholesale Customer (whether permanent or temporary, firm or interruptible) unless:

1. It completes any necessary environmental review under CEQA of the proposed new wholesale water service obligations as provided in Section 4.07;
2. It concurrently completes any necessary environmental review under CEQA as provided in Section 4.07 and commits to make both San Jose and Santa Clara permanent customers with Individual Supply Guarantees equal to at least 9 MGD;
3. Doing so increases the reliability of the Regional Water System; and
4. This Agreement is concurrently amended (a) to reflect that increased reliability by means of an increased commitment by San Francisco to deliver water during Droughts and (b) to address the effects, if any, of the new customer(s) on water supply, water quality and cost to existing customers of the Regional Water System.

C. **New Retail Customers.** San Francisco may enter into new retail water service obligations outside of the City and County of San Francisco:

1. Only in Alameda, San Mateo, Santa Clara, San Joaquin and Tuolumne Counties;
2. That are within or immediately adjacent to areas in which it currently serves other Retail Customers; and
3. Until the aggregate additional demand represented by the new retail customers reaches 0.5 MGD.

The limitations on serving new Retail Customers described in this subsection do not apply to historical obligations to supply water that may be contained in prior agreements between the SFPUC or its predecessor the Spring Valley Water Company, and individual users or property owners located adjacent to Regional Water System transmission pipelines.

D. **Water Exchanges and Cost Sharing Agreements with Other Water Suppliers.** Subject to completion of necessary environmental review under CEQA, San

Francisco may at any time enter into water exchanges or cost sharing agreements with other water suppliers to enhance dry year or normal year water deliveries, provided that San Francisco cannot incur new water service obligations to such other water suppliers unless the requirements for taking on new wholesale customers in subsections A and B above are met.

3.14. Measurement of Water

A. The parties recognize that continuous and accurate measurement of water deliveries to and from the Regional Water System and maintenance of complete and accurate records of those measurements is necessary (1) for the costs of the Regional Water System to be allocated in accordance with this Agreement, (2) for implementation of other provisions of this Agreement, and (3) for effective operation and maintenance of a water system serving a large urbanized region.

B. It is the responsibility of the SFPUC to obtain and record these measurements. To do so, the SFPUC shall install, maintain and operate measuring and recording equipment at the following locations: (1) inputs to the Regional Water System from all water sources ("System Input Meters"), (2) internal flow meters to support operation of the Regional Water System ("In-Line Meters"), (3) deliveries to the City at the San Francisco-San Mateo County line ("County-Line Meters") and to three reservoirs in San Francisco ("In-City Terminal Reservoir Meters"), (4) deliveries to SFPUC Retail Customers located outside the boundaries of the City, and (5) deliveries to the Wholesale Customers, as described and illustrated in Attachment J.

C. The SFPUC shall inspect, test, service, and calibrate the measuring and recording equipment installed at the locations described in subsection B and will repair or replace them when necessary, in order to ensure that their accuracy is consistent with specifications provided in Attachment J.

D. The SFPUC shall continue to contract with a qualified independent metering consultant to perform periodic inspection, testing, servicing and calibration of the County-Line Meters, the In-City Terminal Reservoir Meters, and the System Input and In-Line Meters described in Attachment J, as well as the portion of the SFPUC's Supervisory Control and Data Acquisition (SCADA) system that utilizes the flow signals produced by that measuring and recording equipment. The method, schedule and frequency for calibration and maintenance of the County-Line Meters and the In-City Terminal Reservoir Meters are specified in Attachment J. The SFPUC shall provide copies of the metering consultant's reports to BAWSCA.

E. System Input Meters measure water deliveries into the Regional Water System from sources such as Hetch Hetchy and the SFPUC's water treatment plants. System Input Meters also measure deliveries from the Regional Water System to outside sources or from such sources to the Regional Water System through interties with the Santa Clara Valley Water District and the East Bay Municipal Utility District. In-Line Meters measure internal system flows and are located on the Bay Division Pipelines and other main transmission pipelines. These meters are collectively referred to as the "System Input and In-line Meters." Similar to the County-Line Meters, the System Input and In-Line Meters have secondary metering equipment, such as differential pressure transmitters and flow recorders. The System Input and In-Line Meters, and all associated secondary metering equipment, shall be calibrated and maintained according to the method, schedule, and frequency specified in the Procedures Manual described in subsection G, below.

F. The locations of the smaller and more numerous meters described in subsection B (4) and (5) are not illustrated in Attachment J; however, they are also critical in the determination of cost allocations, and accordingly require continued maintenance and calibration. It is the responsibility of the SFPUC to maintain the accuracy of these meters and their secondary metering equipment.

G. The SFPUC will prepare a Procedures Manual which will describe in detail the procedures for periodic inspection, testing, servicing and calibration of the measuring and recording equipment described in subsection B. Once the Procedures Manual is completed, the SFPUC and BAWSCA may agree that it should supersede some or all of the requirements in Attachment J regarding the County-Line and the In-City Terminal Reservoir Meters. Unless and until such an agreement is reached and documented, however, the requirements in Attachment J, Section D will continue in force as minimum standards for meter maintenance and calibration of the County-Line and In-City Terminal Reservoir Meters (subject to modification under the circumstances described in Attachment J, Section A.4).

H. If BAWSCA and the SFPUC are unable to agree on the water use calculations required by Attachment J for a particular year, the Wholesale Customers may file a demand for arbitration challenging the SFPUC's determination of the Wholesale Revenue Requirement for that year on the basis of its reliance on disputed water use calculations. Such a challenge must be brought in the manner and within the time specified in Section 8.01.

3.15. New Sources of Water Supply to Maintain Supply Assurance

A. **Urgent Reductions of Existing Surface Water Supplies.** Sudden and unanticipated events may require San Francisco to act promptly to protect the health, safety and economic well-being of its Retail and Wholesale Customers. Such sudden events include, but are not limited to drought, earthquakes, terrorist acts, catastrophic failures of facilities owned and operated by San Francisco, and other natural or man-made events. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers. San Francisco will keep the Wholesale Customers informed of actions being taken under this subsection, progress made, and contingency actions the Wholesale Customers may need to consider taking. To the extent appropriate and applicable, San Francisco will act in accordance with Section 3.11 and the ERRP. Nothing in this subsection limits San Francisco's obligations under Section 3.11 to pursue additional sources of supply to augment supplies available during drought.

B. **Non-Urgent Reductions of Existing Surface Water Supplies.** Climate change, regulatory actions and other events may impact San Francisco's ability to maintain the Supply Assurance from its existing surface water supplies, but on timescales long enough to permit San Francisco to collaborate with its Wholesale Customers on how best to address possible impacts to water supply. If such events diminish San Francisco's ability to maintain the Supply Assurance, San Francisco may increase the Wholesale Revenue Requirement to pay for planning, evaluation and implementation of replacement sources of supply when such needs arise and without the prior approval of the Wholesale Customers. San Francisco will keep the Wholesale Customers informed of actions being taken under this subsection, progress made, and contingency actions the Wholesale Customers may need to consider taking. San Francisco will solicit input and recommendations from BAWSCA and the Wholesale Customers, and take those recommendations into consideration. Prior to Commission approval of plans or taking other actions that would impact the Wholesale Revenue Requirement, San Francisco will hold a public hearing to receive written and oral comments. Nothing in this subsection modifies San Francisco's obligation to maintain the ability to provide the Supply Assurance under this Agreement.

3.16. New Sources of Water Supply to Increase Supply Assurance

A. **Surface Water Supplies From Existing Watersheds After 2018.** The Commission action in SFPUC Resolution Number 08-0200, adopted October 30, 2008 requires certain decisions by San Francisco regarding whether to supply more than 265 MGD from its watersheds following 2018. Such decisions are to be made by December 31, 2018, subject to the exercise of San Francisco's retained CEQA discretion in Section 4.07. San Francisco's future decisions may include an offer to increase the Supply Assurance at the request of some or all of its Wholesale Customers. Costs associated with providing additional water from its existing water supplies in San Mateo, Santa Clara, Alameda, Tuolumne, and Stanislaus Counties shall be allocated to Wholesale and Retail Customers as described in Article 5.

B. **New Water Supplies.** If San Francisco seeks to develop additional water supplies from new sources to increase the Supply Assurance available to Wholesale Customers, studies and resulting water supply projects will be conducted jointly with BAWSCA under separate agreement(s) specifying the purpose of the projects, the anticipated regional benefits and how costs of studies and implementation will be allocated and charged. Nothing in this Agreement shall serve as precedent for the allocation of such new supply capital costs between Retail and Wholesale Customers or associated operational expenses, which shall only occur following approval of both parties and amendment of this Agreement, if necessary, under Section 2.03.

3.17. Westside Basin Groundwater Storage and Recovery Project

In August 2014, the SFPUC approved a WSIP project called the Groundwater Storage and Recovery Project ("Project"), which authorized the SFPUC to enter into an agreement governing the operation of the Project with the Participating Pumpers entitled "Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Groundwater Basin by and among the San Francisco Public Utilities Commission, the City of Daly City, the City of San Bruno, and California Water Service Company" ("Project Operating Agreement"), which became effective on December 16, 2014. The Project produces Regional benefits for all customers of the Regional Water System by making use of available groundwater storage capacity in the Southern portion of the Westside Basin through the supply of additional surface water ("In Lieu Water") to the Participating Pumpers from the Regional Water System, in exchange for a corresponding reduction in groundwater pumping at existing wells owned by the Participating Pumpers. The new groundwater supply that accrues to storage as a result of

delivery of In Lieu Water will be recovered from the SFPUC Storage Account during water shortages using new Regional Project Facilities or Shared Facilities operated by the Participating Pumpers and the SFPUC. Project mitigation capital costs and annual Project operations and maintenance expenses and water supplies shall be allocated as follows:

A. All In Lieu Water delivered to the Participating Pumpers shall be (1) temporary and interruptible in nature and (2) at the sole discretion of the SFPUC based on the total volume of water available to the Regional Water System.

B. All In Lieu Water delivered to the Participating Pumpers shall be considered a delivery of water to storage and shall not be construed to affect or increase the Individual Supply Guarantees of these Wholesale Customers or to otherwise entitle them to any claim of water in excess of their Individual Supply Guarantees.

C. In the event that it is necessary to reduce the Participating Pumpers' aggregate designated quantity of groundwater production allocation pursuant to Section 4.7 of the Project Operating Agreement, the SFPUC may supply an annual maximum of up to 500 acre feet of Participating Pumper Replacement Water from the Regional Water System at a price comparable to the Participating Pumpers' then-current groundwater cost, as may be adjusted annually as provided for in Section 4.7 of the Project Operating Agreement. Each of the Participating Pumpers may elect to take delivery of its share of Participating Pumper Replacement Water either as interruptible surface water deliveries from the Regional Water System or as a transfer of storage credits from the SFPUC Storage Account. All revenue received from such water sales or transfers shall be considered revenue related to the sale of water and allocated between Retail Customers and Wholesale Customers on the basis of Proportional Water Use. All volumes of Participating Pumper Replacement Water delivered shall not be construed to affect or increase the Individual Supply Guarantees of these Wholesale Customers or to otherwise entitle them to any claim of water in excess of their Individual Supply Guarantees.

D. Any operation and maintenance expenses incurred by the Participating Pumpers and the SFPUC that are related to the operation of Project Facilities and Shared Facilities for Project purposes shall be included as Regional pumping expenses under Section 5.05.B of this Agreement and included as part of the Wholesale Revenue Requirement. For rate setting purposes, estimated Project operation and maintenance expenses shall be used as set forth in

Section 6.01 of this Agreement. Operation and maintenance expenses associated with the Participating Pumpers' Existing Facilities that do not provide Regional benefits shall not be included in the Wholesale Revenue Requirement. On a case-by-case basis, the SFPUC may include operation and maintenance expenses associated operation of the Participating Pumpers' Existing Facilities in the Wholesale Revenue Requirement provided that such expenses (1) are solely attributable to Project operations for a Regional benefit and (2) are not caused by the Participating Pumper's failure to operate and maintain its existing wells in a reasonable and prudent manner consistent with water utility industry standards. The SFPUC shall provide the Wholesale Customers with copies of Project Operation and Maintenance Expenses documentation provided by the Participating Pumpers under Section 9.2 of the Project Operating Agreement.

E. The Project Mitigation, Monitoring and Reporting Program ("MMRP") adopted by the SFPUC included mitigation measure HY-6 to prevent well interference impacts to the Irrigation Well Owners. In mitigation measure HY-6, the SFPUC agreed to provide standby supplies of Irrigation Well Owner Replacement Water from the Regional Water System, to alter Project operations, and implement other actions (e.g., well replacement) to avoid well interference impacts that require the consent of the Irrigation Well Owners. The SFPUC's Project mitigation and other obligations to the Irrigation Well Owners are memorialized in substantially identical "Groundwater Well Monitoring and Mitigation Agreements" with one or more of the Irrigation Well Owners. For purposes of this Agreement, water supplies, and the capital costs and operations and maintenance expenses associated with providing Irrigation Well Owner Replacement Water and implementing other mitigation actions identified in the Project MMRP, shall be allocated as follows:

1. Irrigation Well Owner Replacement Water shall be limited to a cumulative maximum of 1.76 mgd and shall be delivered only in volumes necessary for mitigating well interference impacts as provided in the Project MMRP. The supply of Irrigation Well Owner Replacement Water by the SFPUC shall not be considered a new water supply commitment to Retail Customers or Wholesale Customers under Section 3.13 of this Agreement. The annual volume of Irrigation Well Owner Replacement Water supplied shall be metered and allocated as water from the Regional Water System during shortages between Retail Customers and Wholesale Customers in proportion to and consistent with the provisions of the Shortage Allocation Plan. All revenue received from Irrigation Well Owners for metered deliveries of Irrigation Well Owner Replacement Water shall be considered revenue related to the sale of

water and allocated between Retail Customers and Wholesale Customers on the basis of Proportional Water Use.

2. All Project capital costs incurred by the SFPUC in complying with the mitigation measures in the Project MMRP shall be considered Regional capital costs under Section 5.04 of this Agreement.

3. Operations and maintenance expenses incurred by the SFPUC in maintaining Project mitigation assets described in the Project MMRP shall be considered Regional transmission and distribution expenses under Section 5.05.D of this Agreement. Well pumping expenses that are required to be paid by the SFPUC in the agreements with the Irrigation Well Owners shall be considered Regional pumping expenses under Section 5.05.B of this Agreement.

4. Any wheeling charges imposed by California Water Service Company for delivery of Irrigation Well Owner Replacement Water shall be considered Regional transmission and distribution expenses under Section 5.05.D of this Agreement.

F. F. The SFPUC will audit (1) operation and maintenance expenses submitted by the Participating Pumpers, and (2) well pumping expenses submitted by the Irrigation Well Owners, for reimbursement to confirm that such costs were incurred, respectively, as a result of (1) operating Project Facilities and Shared Facilities for a Regional benefit and (2) complying with mitigation obligations in the Project MMRP. Costs associated with the use of Project Facilities or Shared Facilities for Direct Retail or Direct Wholesale purposes, or that do not otherwise provide Regional benefits, shall not be included in the Wholesale Revenue Requirement. The SFPUC is responsible for resolving disputes with the Participating Pumpers and Irrigation Well Owners concerning expense allocations. Project expense documentation, including documentation of negotiation and settlement of disputed costs, will be available for review during the Compliance Audit described in Section 7.04 of this Agreement. The Wholesale Customers may dispute the SFPUC's resolution of expense allocations through the arbitration provisions in Section 8.01 of this Agreement.

G. The SFPUC may direct the Participating Pumpers to recover water from the SFPUC Storage Account for any type of shortage referenced in Section 3.11 of this Agreement. Water recovered from the SFPUC Storage Account using Project Facilities and Shared Facilities may be used for (1) the benefit of all Regional Water System customers; (2) Retail Customers; or (3) one or more of the Participating Pumpers. The Wholesale Revenue Requirement shall

only include operation and maintenance expenses incurred due to the operation of Project Facilities and Shared Facilities for Regional benefits, including expenses incurred due to compliance with mitigation measures in the Project MMRP.

H. All water recovered during shortages caused by drought from the SFPUC Storage Account for Regional benefit, by the Participating Pumpers and by the SFPUC for delivery to Retail and Wholesale Customers, shall be used to free up a comparable volume of surface water from the Regional Water System for allocation in accordance with the Tier 1 Shortage Plan.

I. If the Project is terminated for any reason, including breach of the Project Operating Agreement by one or more of the Participating Pumpers or the SFPUC, a force majeure event as specifically defined by the Project Operating Agreement, or due to regulatory action or legal action, then:

1. Any water remaining in the SFPUC Storage Account shall be used for the benefit of all customers of the Regional Water System;

2. Outstanding eligible operation and maintenance expenses, including costs incurred during recovery of remaining stored water, will be allocated as provided in this Section 3.17 of this Agreement; and

3. If Project Facilities are no longer capable of being used for a Regional benefit, the Wholesale Customers will be credited with their share of proceeds from disposition of Project Facilities or reimbursed their share of such capital costs for any Project Facilities which are retained by the SFPUC for Direct Retail benefit and not used for the benefit of the Wholesale Customers, on the basis of (a) original cost less depreciation and outstanding related Indebtedness or (b) original cost less accumulated depreciation for revenue funded Project Facilities.

J. In the event that a Participating Pumper establishes the occurrence of a force majeure event as defined in the Project Operating Agreement, the SFPUC may enter into negotiations with the Participating Pumper to take over the operation of the portion of any Shared Facilities used for Project purposes for continued Regional use. If the SFPUC cannot reach agreement regarding the continued use of Shared Facilities for ongoing Regional benefit, the Participating Pumper shall reimburse the SFPUC and the Wholesale Customers for their respective shares of previously incurred Project capital costs used to upgrade the Shared

Facilities on the basis of (a) original cost less depreciation and outstanding related Indebtedness or (b) original cost less accumulated depreciation for revenue funded Shared Facilities. In the event that the SFPUC seeks to take over the operation of Shared Facilities for Direct Retail use, or one or more Wholesale Customers seeks to negotiate with a Participating Pumper to take over the operation of Shared Facilities for individual use or Direct Wholesale use, the party or parties benefiting from such transfer of Shared Facilities shall reimburse the other parties to this Agreement with their respective shares of previously incurred Project capital costs on the basis described in the previous sentence, or as the parties may otherwise agree.

3.18. Water Supply Agreement Amendment Required.

San Francisco may not change the existing condition of the Hetch Hetchy Reservoir by:

1. Abandoning or decommissioning O'Shaughnessy Dam; or
2. Draining Hetch Hetchy Reservoir, except for purposes of (i) repair, rehabilitation, maintenance, improvement, or reconstruction of O'Shaughnessy Dam or appurtenances, (ii) supplying water to the Bay Area during drought, or (iii) meeting water release requirements under the Raker Act, or federal or state law,

unless the parties enter into an amendment to the Water Supply Agreement, in full force and effect, adopted in accordance with Section 2.03.

The amendment shall state, or restate, as the case may be:

- A. The level of service goals for seismic reliability and delivery reliability adopted by the Commission in conjunction with such proposed changes to the Regional Water System, provided such goals are at least as protective of the Wholesale Customers as the Level of Service Goals and Objectives;
- B. The level of water quality to be delivered, which is currently provided for in Section 3.08, and
- C. The specific cost allocation procedures, written as an amendment to Article 5, which apply to (1) the abandonment or decommissioning of O'Shaughnessy Dam, or (2) the draining of Hetch Hetchy Reservoir, and (3) the development, operation and maintenance of New Regional Assets

that may be required to replace water supplied by Hetch Hetchy Reservoir and delivered to the Bay Area.

In the event that the parties are not able to agree upon and approve an amendment to the Water Supply Agreement as set forth above, San Francisco may not abandon or decommission O'Shaughnessy Dam or drain Hetch Hetchy Reservoir.

Article 4. Implementation of Interim Supply Limitation.

4.01. Interim Supply Limitation Imposed by SFPUC

In adopting the WSIP in Res. No. 08-0200, the Commission included full implementation of all proposed WSIP capital improvement projects to achieve Level of Service Goals and Objectives relating to public health, seismic safety, and delivery reliability, but decided to adopt a water supply element that includes the Interim Supply Limitation. This article describes how the parties will implement the Interim Supply Limitation imposed by the SFPUC between the Effective Date and December 31, 2018, and how the SFPUC will conduct water supply planning after December 31, 2018.

4.02. Retail and Wholesale Customer Allocations Under Interim Supply Limitation

The Interim Supply Limitation is allocated as follows between Retail and Wholesale Customers:

Retail Customers' allocation: 81 MGD

Wholesale Customers' allocation: 184 MGD

The Wholesale Customers' collective allocation of 184 MGD under the Interim Supply Limitation includes the demand of the cities of San Jose and Santa Clara, whose demand is not included in the Supply Assurance, as provided in Section 3.02.B. By December 31st, 2010, the Commission will establish each Wholesale Customer's Interim Supply Allocation at a public meeting.

4.03. Transfers of Interim Supply Allocations

A. Any Wholesale Customer, including Hayward, may transfer a portion of its Interim Supply Allocation to one or more other Wholesale Customers, as provided in this section. All Wholesale Customers are also eligible transferees, including California Water Service Company up to its Individual Supply Guarantee.

B. Transfers of a portion of an Interim Supply Allocation must be prospective. The duration of a transfer cannot be less than the balance of the fiscal year. The minimum quantity that may be transferred is 1/10th of a MGD.

C. Transfers of portions of Interim Supply Allocations are subject to approval by the SFPUC. SFPUC review is limited to determining (1) whether a proposed transfer complies with

the Act, and (2) whether the affected facilities in the Regional Water System have sufficient capacity to accommodate delivery of the increased amount of water to the proposed transferee.

D. The participants in a proposed transfer shall provide notice to the SFPUC specifying the amount of the Interim Supply Allocation proposed to be transferred and the proposed effective date of the transfer, which shall not be less than 60 days after the notice is submitted to the SFPUC. The SFPUC may require additional information reasonably necessary to evaluate the operational impacts of the transfer. The SFPUC will not unreasonably withhold or delay its approval; if the SFPUC does not act on the notice within 60 days, the transfer will be deemed to have been approved.

E. Within 30 days after the transfer has become effective, both the transferor and the transferee will provide written notice to the SFPUC and BAWSCA.

F. Transfers of Interim Supply Allocations shall continue in effect until the earlier of (1) delivery of written notice to the SFPUC by the transfer participants that the transfer has been rescinded or (2) December 31, 2018.

4.04. Environmental Enhancement Surcharge

A. **Establishment of Environmental Enhancement Surcharge.** Beginning with wholesale water rates for fiscal year 2011-2012, and continuing for the duration of the Interim Supply Limitation, the Commission will establish the Environmental Enhancement Surcharge concurrently with the budget-coordinated rate process set forth in Article 6 of this Agreement. The monetary amount of the Environmental Enhancement Surcharge per volume of water, such as dollars per acre-foot, will be equivalent for Retail Customer use in excess of 81 MGD and Wholesale Customer use in excess of 184 MGD. The Environmental Enhancement Surcharge will be simple to calculate so that Wholesale Customers can estimate potential surcharges for budgeting purposes and establish retail rates within their service areas.

B. **Application of Environmental Enhancement Surcharge.** Beginning in fiscal year 2011-12, the Environmental Enhancement Surcharge will be levied only if and when combined Retail Customer and Wholesale Customer purchases exceed the Interim Supply Limitation of 265 MGD and if the fund described in subsection D below has been established by the San Francisco Board of Supervisors. In that event, the Environmental Enhancement Surcharge will apply to Retail Customers for use in excess of 81 MGD and to individual

Wholesale Customers for use in excess of their Interim Supply Allocations established by the Commission pursuant to Section 4.02.

1. Environmental Enhancement Surcharges related to the Retail Customers' use in excess of their 81 MGD Retail Customer Allocation will be paid by the SFPUC, and no portion of such surcharges may be allocated to Wholesale Customers. The method of recovering the Environmental Enhancement Surcharges imposed upon Retail Customers shall be within the sole discretion of the SFPUC.

2. Environmental Enhancement Surcharges related to the individual Wholesale Customers' use in excess of their respective Interim Supply Allocations will be paid to the SFPUC by individual Wholesale Customers.

C. **Collection of Environmental Enhancement Surcharge.** Notwithstanding the budget-coordinated rate setting process contemplated in Article 6 of this Agreement, the Environmental Enhancement Surcharge for any given year will be determined retrospectively based on actual annual usage during the fiscal year in excess of the Interim Supply Allocation and paid in equal monthly installments over the remainder of the immediately following fiscal year.

D. **Establishment of Fund for Environmental Enhancement Surcharge Proceeds.** Environmental Enhancement Surcharges paid by the SFPUC and by Wholesale Customers will be placed into a restricted reserve fund. The SFPUC will request the San Francisco Board of Supervisors to establish this fund by ordinance and, if adopted, the fund will be subject to the following restrictions:

1. Interest earnings will stay in the reserve fund.
2. The reserve fund shall (a) be subject to automatic appropriation; (b) require unexpended and unencumbered fund balances to be carried forward from year to year; and (c) not be transferred to the San Francisco General Fund.
3. The reserve fund may be used only for specific environmental restoration and enhancement measures for the Sierra and local watersheds, such as those included in the Watershed Environmental Improvement Program.
4. Environmental Enhancement Surcharge proceeds shall be expended in an expeditious manner. Any Environmental Enhancement Surcharge

proceeds that remain in the reserve fund as of December 31, 2018 shall be used to complete projects previously approved under subsection E. Upon completion of the identified projects, the balance of any unexpended sums in the reserve fund shall be distributed to BAWSCA and the SFPUC in proportion to the total amount of surcharges assessed to the Wholesale and Retail Customers, respectively.

E. **Use of Environmental Enhancement Surcharge Proceeds.** Specific uses of Environmental Enhancement Surcharges will be decided by the SFPUC and BAWSCA General Managers following input from environmental stakeholders and other interested members of the public. If parties are unable to agree, then they will jointly select a third person to participate in making the decision.

4.05. San Jose/ Santa Clara Interim Supply Allocation and Process for Reduction/ Termination.

San Francisco will supply a combined annual average of 9 MGD to the cities of San Jose and Santa Clara through 2028. Water supplied by San Francisco may only be used in the defined service areas of San Jose and Santa Clara shown on Attachment Q-1 and Q-2, respectively. San Francisco may reduce the quantity of water specified in this section when it establishes the Interim Supply Allocations for Wholesale Customers in Section 4.02. The establishment of Interim Supply Allocations for San Jose and Santa Clara shall not be considered a reduction of supply within the meaning of this section, provided that the Interim Supply Allocations assigned to San Jose and Santa Clara do not effect a reduction greater than the aggregate average reduction in Individual Supply Guarantees for Wholesale Customers that have such guarantees. The application of Interim Supply Allocations to San Jose and Santa Clara, and water supply planning after December 31, 2018, are subject to the following provisions:

A. In December 2010 and in each December thereafter through 2027, the SFPUC shall prepare and the Commission shall consider, at a regularly scheduled public meeting, a Water Supply Development Report detailing progress made toward (1) meeting the Interim Supply Limitation by June 30, 2018 and (2) developing additional water supplies that will allow the Commission to designate San Jose and Santa Clara as permanent Wholesale Customers of the Regional Water System with a combined Individual Supply Guarantee of up to 9 MGD by the end of the Term on June 30, 2034.

B. The annual Water Supply Development Report shall be based on water purchase projections and work plans prepared by the SFPUC for the Retail Customers and by BAWSCA for the Wholesale Customers, respectively, and submitted to the Commission in June of each year beginning in 2010.

C. If the Commission finds that the projections in the Water Supply Development Report show that (1) the Interim Supply Limitation will not be met by June 30, 2018, as a result of Wholesale Customers' projected use exceeding 184 MGD, or (2) the purchases of the Wholesale Customers, including San Jose and Santa Clara, are projected to exceed 184 MGD before June 30, 2028, the Commission may issue a conditional ten year notice of interruption or reduction in supply of water to San Jose and Santa Clara.

D. Upon issuance of the conditional notice of interruption or reduction, the SFPUC will prepare a new analysis of water supply that will be utilized by the San Francisco Planning Department in its preparation of any necessary documentation under CEQA pursuant to Section 4.07 on the impacts of interrupting or reducing service to San Jose and Santa Clara.

E. Such notice of interruption or reduction will be rescinded if the Commission finds, based upon a subsequent annual Water Supply Development Report, that (1) sufficient progress has been made toward meeting the Interim Supply Limitation, or (2) projections show that the projected purchases of the Wholesale Customers, including San Jose and Santa Clara, will not exceed 184 MGD by June 30, 2028.

F. In no case shall any interruption or reduction of service to San Jose or Santa Clara pursuant to this section become effective less than two years from the completion of the CEQA process (not including resolution of any appeals or litigation) or ten years from the notice, whichever is longer. If the ten year notice is issued after 2018, such interruption or reduction would be effective after 2028.

G. If deliveries to San Jose and Santa Clara are interrupted, existing turnout facilities to San Jose and Santa Clara will remain in place for possible use during emergencies.

H. San Francisco and the cities of San Jose and Santa Clara will cooperate with BAWSCA and the Santa Clara Valley Water District in the identification and implementation of additional water sources and conservation measures for the cities' service areas that are

relevant to the water supply and the possible offer of permanent status for the two cities by the SFPUC.

4.06. San Francisco Decisions in 2028 Regarding Future Water Supply

A. By December 31, 2028, San Francisco will have completed any necessary CEQA review pursuant to Section 4.07 that is relevant to making San Jose and Santa Clara permanent customers of the Regional Water System and will decide whether or not to make San Jose and Santa Clara permanent customers of the Regional Water System with a combined Individual Supply Guarantee of 9 MGD allocated equally between the two cities, as well as how much water in excess of 9 MGD it will supply to San Jose and Santa Clara. San Francisco will make San Jose and Santa Clara permanent customers only if, and to the extent that, San Francisco determines that Regional Water System long term water supplies are available. In the event that San Francisco decides to afford permanent status to San Jose and Santa Clara, this Agreement will be amended pursuant to Section 2.03.

B. By December 31, 2028, San Francisco will have completed any necessary CEQA review pursuant to Section 4.07 and will decide how much water, if any, in excess of the Supply Assurance it will supply to Wholesale Customers from the Regional Water System to meet their projected future water demands until the year 2040, and whether to offer a corresponding increase in the Supply Assurance as a result of these determinations.

4.07. Retained Discretion of SFPUC and Wholesale Customers

A. This Agreement contemplates discretionary actions that the SFPUC and the Wholesale Customers may choose to take in the future that could result in physical changes to the environment ("Discretionary Actions"). The Discretionary Actions include decisions to:

1. Develop additional or alternate water resources by the SFPUC or one or more Wholesale Customers;
2. Implement the physical facilities comprising the WSIP by December 30, 2021;
3. Approve wheeling proposals by Wholesale Customers;
4. Approve new wholesale customers and water exchange or cost sharing agreements with other water suppliers;
5. Provide additional water to San Jose and/or Santa Clara;
6. Offer permanent status to San Jose and/or Santa Clara;

7. Reduce or terminate supply to San Jose and/or Santa Clara;
8. Provide additional water to Wholesale Customers in excess of the Supply Assurance to meet their projected future water demands;
9. Offer a corresponding volumetric increase in the Supply Assurance; and
10. Implement the Hetch Hetchy Water and Power projects listed in Attachment R-2.

The Discretionary Actions may require the SFPUC or Wholesale Customers to prepare environmental documents in accordance with CEQA prior to the SFPUC or the Wholesale Customers determining whether to proceed with any of the Discretionary Actions. Accordingly, and notwithstanding any provision of this Agreement to the contrary, nothing in this Agreement commits the SFPUC or the Wholesale Customers to approve or carry out any Discretionary Actions that are subject to CEQA. Furthermore, the SFPUC's or Wholesale Customers' decisions to approve any of these Discretionary Actions are subject to the requirement that San Francisco and each Wholesale Customer, as either a "Lead Agency" (as defined in Section 21067 of CEQA and Section 15367 of the CEQA Guidelines) or a "Responsible Agency" (as defined in Section 21069 of CEQA and Section 15381 of the CEQA Guidelines) shall have completed any CEQA-required environmental review prior to approving a proposed Discretionary Action.

B. In considering any proposed Discretionary Actions, the SFPUC and Wholesale Customers retain absolute discretion to: (1) make such modifications to any of the proposed Discretionary Actions as may be necessary to mitigate significant environmental impacts; (2) select feasible alternatives to the proposed Discretionary Actions that avoid significant adverse impacts; (3) require the implementation of specific measures to mitigate the significant adverse environmental impacts as part of the decision to approve the Discretionary Actions; (4) balance the benefits of the proposed Discretionary Actions against any significant environmental impacts before taking final actions to approve the proposed Discretionary Actions if such significant impacts cannot otherwise be avoided; or (5) determine not to proceed with the proposed Discretionary Actions.

Article 5. Wholesale Revenue Requirement

5.01. Scope of Agreement

This Article shall be applicable only to the water rates charged by San Francisco to the Wholesale Customers. Nothing contained in this Agreement shall limit, constrain, or in any way affect the rates which San Francisco may charge for water sold to Retail Customers or the methodology by which such rates are determined.

5.02. General Principles

This Article sets forth the method by which the Wholesale Customers' collective share of expenses incurred by the SFPUC in delivering water to them will be determined. This collective share is defined as the "Wholesale Revenue Requirement."

A. The SFPUC currently operates several enterprises, including the Water Enterprise, the Wastewater Enterprise, and the Hetch Hetchy Enterprise.

B. The Wastewater Enterprise is responsible for treating sewage within San Francisco and provides no benefit to the Wholesale Customers.

C. The Hetch Hetchy Enterprise is responsible for storing and transmitting water to the Water Enterprise, generating hydroelectric power and transmitting it to San Francisco, generating electric power within San Francisco, and distributing electricity and steam heat within San Francisco. Its water supply operations provide benefits to the Wholesale Customers.

D. The Water Enterprise delivers water to both Retail Customers, which are located both within and outside San Francisco, and to the Wholesale Customers, all of which are located outside San Francisco.

E. This Article implements two general principles as follows: (1) the Wholesale Customers should not pay for expenses of SFPUC operations from which they receive no benefit and (2) the Wholesale Customers should pay their share of expenses incurred by the SFPUC in delivering water to them on the basis of Proportional Annual Use unless otherwise explicitly provided in this Agreement.

F. To implement these general principles, the Wholesale Revenue Requirement will consist of, and be limited to, the Wholesale Customers' shares of the following categories of expense:

1. Capital cost recovery of Water Enterprise Existing Assets, and Hetch Hetchy Enterprise Existing Assets classified as Water-Only and the Water-Related portion of Joint assets (Section 5.03)
2. Contribution to the capital cost of Water Enterprise New Regional Assets (Section 5.04)
3. Water Enterprise operation and maintenance expenses, including power purchased from the Hetch Hetchy Enterprise that is used in the operation of the Water Enterprise (Section 5.05)
4. Water Enterprise administrative and general expenses (Section 5.06)
5. Water Enterprise property taxes (Section 5.07)
6. The Water Enterprise's share of the Hetch Hetchy Enterprise's operation and maintenance, administrative and general, and property tax expenses (Section 5.08)
7. The Water Enterprise's share of the Hetch Hetchy Enterprise's capital cost of New Assets classified as Water-Only and the Water-Related portion of Joint assets (Section 5.09)

In each of these cost categories, Direct Retail Expenses will be allocated entirely to Retail Customers. Direct Wholesale Expenses will be allocated entirely to the Wholesale Customers. Regional Expenses will be allocated between Retail Customers and Wholesale Customers as provided in this Article.

G. For purposes of establishing the rates to be charged Wholesale Customers, expenses will be based on the budget for, and estimates of water purchases in, the following fiscal year, as provided in Article 6. For purposes of accounting, the Wholesale Revenue Requirement will be determined on the basis of actual expenses incurred and actual water use, as provided in Article 7.

H. In addition, rates charged to Wholesale Customers may include the Wholesale Customers' contribution to a Wholesale Revenue Coverage Reserve, as provided in Section 6.06, which is not included in the Wholesale Revenue Requirement itself.

5.03. Capital Cost Recovery - Existing Regional Assets

A. SFPUC has previously advanced funds to acquire or construct Existing Assets used and useful in the delivery of water to both Wholesale Customers and Retail Customers. The parties estimate that the Wholesale Customers' share of the net book value of these assets, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately \$366,734,424, as shown on Attachment K-1.

B. In addition, SFPUC has also previously advanced funds received from Retail Customer revenues to acquire or construct assets included in Construction-Work-In-Progress (CWIP) as of June 30, 2009. The parties estimate that the Wholesale Customers' share of the book value of these revenue funded capital expenditures, as of the expiration of the 1984 Agreement on June 30, 2009, will be approximately \$15,594,990, as shown on Attachment K-2. The Wholesale Customers shall pay their share of the cost of Existing Assets and revenue-funded CWIP by amortizing the amounts shown on Attachment K-1 and Attachment K-2 over 25 years at an interest rate of 5.13 percent. The amounts to be included in the Wholesale Revenue Requirement pursuant to this section shall be the sum of the annual principal and interest amounts shown on Attachments K-3 (for Water Enterprise Regional Assets and the one Direct Wholesale Asset) and K-4 (for Hetch Hetchy Enterprise Water-Only Assets and the Water-Related portion [45 percent] of Joint assets) calculated on the basis of monthly amortization of principal as set forth on Attachments K-3 and K-4.

C. In addition, the Commission has previously appropriated funds, advanced through rates charged to Retail Customers, for construction of capital projects. Some of these projects are active, and have unexpended balances of appropriated funds that are not included in CWIP as of June 30, 2009. These projects, and the associated balances, are shown on Attachment K-5. Expenditures of funds from these balances during FY 2009-10, FY 2010-11 and FY 2011-12 will be reviewed in FY 2012-13. The SFPUC will prepare a report showing the amount expended in each year on each project and the total expended during all years on all projects that are categorized as Regional or, in the case of Hetch Hetchy Enterprise, are categorized as either Water-Only or Joint. The wholesale share of that total will be determined using the allocation principles in this Agreement based on Proportional Water Use during those three years. The result, plus accrued interest at the rate specified in Section 6.05.B, will be calculated by the SFPUC and its calculation reviewed by the Compliance Auditor as part of the Compliance Audit for FY 2012-13. The audited total will be paid based on a schedule of level

annual principal and interest amounts over ten years at an interest rate of 4.00%, calculated on a monthly amortization basis. All or any portion of the balance may be prepaid. The first year's payment will be included in the Wholesale Revenue Requirement for FY 2014-15.

D. The parties agree that the Wholesale Customers' share of the net book values of Existing Regional Assets as of June 30, 2008 as shown on Attachment K-1 are accurate. The compliance audit conducted on the calculation of the FY 2008-09 Suburban Revenue Requirement required by the 1984 Agreement will determine the actual amounts of depreciation on, and capital additions to, plant in service during that fiscal year. Those amounts will be compared to the corresponding estimates shown on Attachments K-1 and K-2. The differences will be added to or subtracted from the estimated asset values shown on Attachments K-1 and K-2 and the amortization schedules in Attachments K-3 and K-4 will be recalculated. The wholesale allocation factors shall be fixed at 70.1% for the Water Enterprise Existing Assets and 64.2% for Hetch Hetchy Enterprise Existing Assets for both the preliminary and final payment schedules. The SFPUC will prepare and provide to the Wholesale Customers revised Attachments K-1 through K-4 based on the Wholesale Customers' share of the net book value of the assets placed in service as of June 30, 2009 used to provide water service to the Wholesale Customers and the net book value of revenue-funded CWIP expended as of June 30, 2009. The revised Attachments K-1 through K-4 shall be approved by the General Manager of the SFPUC and the General Manager/CEO of BAWSCA and will be substituted for the original Attachments K-1 through K-4.

E. The original Attachments K-1 through K-4, based on estimates, shall be used for estimating the Wholesale Revenue Requirement for the fiscal year beginning July 1, 2009. The revised Attachments, based on audited actuals, shall be used to determine the actual Wholesale Revenue Requirement for FY 2009-10 and to determine the Wholesale Revenue Requirement(s) in all subsequent years, except as may be provided elsewhere in this Agreement.

F. The Wholesale Customers, acting through BAWSCA, may prepay the remaining unpaid Existing Assets principal balance, in whole or in part, at any time without penalty or early payment premium. Any prepayments will be applied in the month immediately following the month in which the prepayment is made and the revised monthly amount(s) will be used to calculate the Wholesale Revenue Requirement. Any partial prepayments must be in an amount at least equal to \$10 million. In the event of a partial prepayment, an updated schedule for the

remaining payments shall be prepared reflecting the unpaid balance after prepayment, amortized through the end of FY 2034, calculated as provided in this section. The updated schedule, approved by the General Manager of the SFPUC and the General Manager/CEO of BAWSCA, will be substituted for Attachment K-3 and/or Attachment K-4.

5.04. Capital Cost Contribution - New Regional Assets

A. **Debt-Funded Capital Additions.** The Wholesale Customers shall pay the wholesale share of Net Annual Debt Service for New Regional Assets. The Regional projects in the WSIP are identified in Attachment L-1.

1. The amount of Net Annual Debt Service for New Regional Assets will be determined for each series of Indebtedness issued. Until the proceeds of a particular series are Substantially Expended, the amount attributable to specific projects will be based on the expected use of proceeds shown in the "Certificate Regarding Use of Proceeds" executed by the SFPUC General Manager on behalf of the Commission in connection with the sale of the Indebtedness, provided such certificate identifies the use of proceeds at a level of detail equivalent to that shown on Attachment L-2, which is a copy of the certificate prepared for the 2006 Revenue Bonds, Series A. If a certificate does not identify the use of proceeds at that level of detail, the SFPUC General Manager shall prepare and execute a separate certificate which does identify the use of proceeds at the level of detail shown on Attachment L-2 and deliver it to BAWSCA within 15 days from the closing of the sale of the Indebtedness.

2. After the proceeds of a series are Substantially Expended, the SFPUC General Manager will prepare and execute a certificate showing the actual expenditure of proceeds at a level of detail equivalent to the initial General Manager certificate. The resulting allocation of Net Debt Service to New Regional Assets for a series of bonds will be used in the fiscal year in which the proceeds have been Substantially Expended and thereafter. Differences between the amount of Net Debt Service paid by Wholesale Customers prior to that year and the amount of Net Debt Service that they should have paid during that time based on the actual expenditure of proceeds will be taken into account in calculation of the balancing account for the fiscal year in which the proceeds were Substantially Expended. The application of the remaining proceeds shall be proportionate to the allocation of the Net Debt Service to New Regional Assets.

3. The Wholesale Customers' share of Net Annual Debt Service for the New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the

projects in the WSIP are categorized as Direct Wholesale.) The Wholesale Customers' share of Net Annual Debt Service for all other New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use.

4. If Indebtedness is issued by the SFPUC to refund the 2006 Revenue Bonds, Series A or to refund any other long-term Indebtedness issued after July 1, 2009, the Net Annual Debt Service attributable to proceeds used for refunding will be allocated on the same basis as the Indebtedness being refunded.

5. The SFPUC will prepare an annual report showing for each issue of Indebtedness and through the most recently completed fiscal year: (1) net financing proceeds available to pay project costs, (2) actual earnings on proceeds, (3) actual expenditures by project. The report shall be substantially in the form of Attachment L-3 and shall be delivered to BAWSCA on or before November 30 of each year, commencing November 2009.

6. In addition to Net Debt Service, Wholesale Customers will pay a proportionate share of annual administrative costs associated with Indebtedness, such as bond trustee fees, credit rating agency fees, letter of credit issuer fees, San Francisco Revenue Bond Oversight Committee fees, etc., but only to the extent such fees are neither paid from proceeds of Indebtedness nor included in SFPUC operation and maintenance or administrative and general expenses.

B. **Revenue-Funded Capital Additions.** The Wholesale Customers shall pay the wholesale share of the appropriation contained in the SFPUC annual budget for each year to be used to acquire or construct New Regional Assets. If such appropriations are reimbursed from proceeds of Indebtedness, the Wholesale Customers will be credited for prior payments made under this Section 5.04.B.

The Wholesale Customers' share of the annual appropriation for revenue-funded New Regional Assets that are categorized as Direct Wholesale will be 100 percent. (None of the Repair and Replacement projects in the SFPUC's most recent capital improvement program updated on February 10, 2009, is categorized as Direct Wholesale.) The Wholesale Customers' share of the annual appropriation for all other revenue-funded New Regional Assets will be determined each year and will be equal to the Wholesale Customers' Proportional Annual Use in each fiscal year. The amount appropriated in each fiscal year for the wholesale share of New Regional Assets shall be contributed to the Wholesale Capital Fund described in Section 6.08 and reported on and administered as shown in that section and Attachments M-1 through M-3.

5.05. Water Enterprise Operation and Maintenance Expenses

There are five categories of Water Enterprise Operation and Maintenance Expenses, described below:

A. Source of Supply

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of collecting and impounding reservoirs, dams, wells and other water supply facilities located outside San Francisco; watershed protection; water supply planning; and the purchase of water.

2. Allocation: Direct Retail expenses, including water supply planning for Retail operations (such as City Retail water conservation programs), will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Source of Supply category.)

B. Pumping

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of water pumping plants, ancillary structures and equipment and surrounding grounds; and fuel and power purchased for pumping water.

2. Allocation: Direct Retail expenses will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Pumping category.)

C. Treatment

1. Description: This category consists of the costs of labor, supervision and engineering; materials and supplies and other expenses incurred in the operation and maintenance of water treatment plants and drinking water quality sampling and testing. The cost of water quality testing will not include expenses incurred on behalf of the Wastewater

Enterprise. Any remaining costs, after adjusting for the Wastewater Enterprise, will be reduced by the amount of revenue received for laboratory analyses of any type performed for agencies, businesses and/or individuals other than the Water and Hetch Hetchy Enterprises.

2. Allocation: Direct Retail expenses will be assigned to the Retail Customers. Regional expenses will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date there are no Direct Wholesale expenses in the Treatment category.)

D. Transmission and Distribution

1. Description: This category consists of the cost of labor, supervision and engineering; materials and supplies; and other expenses incurred in the operation and maintenance of transmission and distribution pipelines, appurtenances, meters (other than those expenses payable by individual Wholesale Customers pursuant to Section 5.10.C.3), distribution reservoirs storing treated water, craft shops and auto shops servicing vehicles used for operation and maintenance of the Regional Water System rather than for Direct Retail facilities, and miscellaneous facilities related to the transmission and distribution of water.

2. Allocation: Direct Retail Transmission and Distribution expenses will be assigned to the Retail Customers. Regional Transmission and Distribution expenses will be allocated between Retail and Wholesale Customers on the basis of Proportional Annual Use. Expenses incurred for the operation and maintenance of three terminal reservoirs, i.e., Sunset Reservoir (North and South Basins), University Mound Reservoir (North and South Basins), and Merced Manor Reservoir, as well as transmission pipelines delivering water to them, are classified as Regional expenses notwithstanding the location of the reservoirs within San Francisco. Direct Wholesale expenses will be assigned to the Wholesale Customers. (As of the Effective Date the only Direct Wholesale expenses in the Transmission and Distribution category are associated with the Palo Alto pipeline.)

E. Customer Services

1. Description: This category consists of labor; materials and supplies; and other expenses incurred for meter reading, customer record keeping, and billing and collection for the Water Enterprise.

2. Allocation: Customer Services expenses will be allocated among the Water Enterprise, the Wastewater Enterprise, and Hetch Hetchy Enterprise in proportion to the time spent by employees in Customer Services for each operating department/enterprise. The Water Enterprise's share of Customer Services expense will be allocated 98 percent to the Retail Customers and two percent to the Wholesale Customers, as illustrated on Attachment N-2, Schedule 1.

5.06. Water Enterprise Administrative and General Expenses

Administrative and General expenses consist of the Water Enterprise's share of the cost of general government distributed through the full-cost Countywide Cost Allocation Plan, the services of SFPUC support bureaus, Water Enterprise administrative and general expenses that cannot be directly assigned to a specific operating and maintenance category, and the cost of the Compliance Audit. These four subcategories, and the method by which costs in each are to be calculated and allocated, are as follows:

A. Countywide Cost Allocation Plan

1. Description: This subcategory consists of the Water Enterprise's share of the costs of San Francisco general government and other City central service departments which are not directly billed to the Water Enterprise or other operating departments. All San Francisco operating departments are assigned a prorated share of these costs through the full-cost Countywide Cost Allocation Plan (COWCAP) prepared annually by the San Francisco Controller.

2. Allocation: The Water Enterprise's assigned share of central government costs as shown in the annual full-cost COWCAP prepared by the San Francisco Controller, will be allocated between Retail Customers and Wholesale Customers on the basis of the composite percentage of the allocated expenses in the five categories of operation and maintenance expense described in Section 5.05. The composite wholesale percentage shown on Attachment N-2, Schedule 1 is 42.07 percent, derived by dividing the wholesale share of Operation and Maintenance expenses (\$46,573,883) by total Operation and Maintenance expenses (\$110,700,133).

B. Services of SFPUC Bureaus

1. Description: This subcategory consists of the support services provided to the Water Enterprise by the SFPUC Bureaus, which presently consist of the General

Manager's Office, Business Services, External Affairs, and Infrastructure Bureau. Business Services presently includes Financial Services, Information Technology Services, Human Resource Services, Fleet Management, and Customer Services.

2. Allocation: There are three steps involved in determining the Wholesale Customers' share of SFPUC Bureau costs.

a. Step One: Bureau expenses which have either been recovered separately or which provide no benefit to Wholesale Customers will be excluded. Examples of Bureau expenses recovered separately include (1) Customer Services expenses, which are recovered as provided in Section 5.05.E, and (2) Infrastructure expenses, which are assigned to individual projects and capitalized. An example of a Bureau expense that provides no benefit to Wholesale Customers is Information Technology Services expenses for support of the San Francisco Municipal Railway. In addition, the SFPUC will continue its practice of assigning City Attorney Office expenses charged to the General Manager's Office for projects or lawsuits that relate to only one enterprise directly to that enterprise. For example, costs related to a lawsuit involving the Wastewater Enterprise will not be assigned to the Water Enterprise.

b. Step Two: Bureau expenses adjusted as provided in Step One will be allocated among the Water Enterprise, the Wastewater Enterprise and the Hetch Hetchy Enterprise on the basis of the actual salaries of employees in each enterprise or department, as illustrated on Attachment N-2, Schedule 7.

c. Step Three: The amount allocated to the Water Enterprise through Step Two will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use.

C. Water Enterprise Administrative and General

1. Description: This category includes expenses incurred by the Water Enterprise that are not readily assignable to specific operating divisions. This category includes the following expenses:

a. Water Administration: This includes the costs of labor and other expenses of the administrative section of the Water Enterprise, supervision and engineering expenses, professional services, travel and training, equipment purchases, and materials and supplies not directly assignable to a specific operating unit.

b. Services Provided by Other City Departments: This includes charges of other San Francisco departments directly billed to the Water Enterprise

administration by other San Francisco departments for services ordered by the Water Enterprise, such as legal services, risk management, telecommunications, employee relations, purchasing, mail services, and workers compensation claims paid.

c. Litigation and Claims Paid: This includes charges incurred for attorney services and claims and judgments paid in litigation arising from the operation of the Water Enterprise.

2. Allocation: In each of these three subcategories, expenses that benefit only Retail Customers will be excluded. For example, the cost of claims and judgments resulting from a break in or leak from pipelines or reservoirs in the Retail Service Area (with the exception of the three terminal reservoirs and pipelines delivering water to them) will be assigned to the Retail Customers. Remaining Water Enterprise Administrative and General expenses will be allocated between Retail Customers and Wholesale Customers on the basis of the composite percentage of allocated operation and maintenance expense categories described in Section 5.05.

D. Compliance Audit. The cost of the Compliance Audit described in Section 7.04 will be assigned 50 percent to the Retail Customers and 50 percent to the Wholesale Customers.

5.07. Water Enterprise Property Taxes

A. Description: This category consists of property taxes levied against property owned by San Francisco located in Alameda, San Mateo and Santa Clara counties and used and managed by the SFPUC.

B. Allocation: All property taxes paid, net of (1) reimbursements received from lessees and permit holders, and (2) refunds from the taxing authority, are Regional expenses. Net property taxes will be allocated between Retail Customers and Wholesale Customers on the basis of Proportional Annual Use.

5.08. Hetch Hetchy Enterprise Expenses

A. **Introduction.** There are two steps involved in determining the amount of the Wholesale Customers' share of Hetch Hetchy Enterprise expenses.

1. The first step is to determine the Water Enterprise's share of Hetch Hetchy Enterprise operation expenses, maintenance expenses, administrative and general expenses, and property taxes.

2. The second step is to determine the Wholesale Customers' share of expenses allocable to the Water Enterprise.

B. Determination of the Water-Related Portion of Hetch Hetchy Enterprise Expenses

1. Operation and Maintenance Expenses: This category consists of the cost of labor, materials and supplies, and other expenses incurred in operating and maintaining Hetch Hetchy Enterprise physical facilities.

a. Description: Expenses associated exclusively with the production and distribution of hydroelectric power (e.g., generating plants and power transmission lines and towers, transformers and associated electric equipment, purchased power, wheeling charges, rental of power lines, etc.) are categorized as Power-Only and are allocated to power. Expenses associated exclusively with the operation and maintenance of facilities that serve only the water function (e.g., water transmission pipelines and aqueducts, activities related to compliance with federal and state drinking water quality laws, etc.) are categorized as Water-Only and are allocated entirely to water. Expenses associated with the operation and maintenance of facilities that serve both the water and power functions (e.g., dams, security programs, etc.) are categorized as Joint and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

2. Administrative and General Expenses: There are three subcategories of Hetch Hetchy Enterprise Administrative and General expenses.

a. Full-Cost Countywide Cost Allocation Plan: This subcategory consists of the cost of San Francisco general government and other City central service departments which are not directly billed to operating departments but allocated through the full-cost Countywide Cost Allocation Plan described in Section 5.06.A. Costs in this subcategory are classified as Joint, and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

b. SFPUC Bureau Costs: This subcategory consists of the expenses described in Section 5.06.B. One hundred percent of Customer Services expenses allocated to the Hetch Hetchy Enterprise are categorized as Power-Only. The remaining amount of Bureau

expenses allocated to the Hetch Hetchy Enterprise pursuant to Section 5.06.B will be reallocated between power and water in proportion to the salaries of Hetch Hetchy Enterprise employees assigned to each function as shown on Attachment N-2, Schedule 7.1.

c. **Other Administrative and General:** This subcategory includes payments to the United States required by the Act, labor, supervision and engineering and other costs not readily assignable to a specific operation or maintenance function or program. Costs related to power administration (such as long range planning and policy analysis for energy development, administration of power contracts, and administration of work orders to City departments for energy services) are Power-Only costs. Costs related to water administration (such as legal and professional services for the protection of the City's water rights) are Water-Only costs and will be assigned to the Water Enterprise. Costs related to both power administration and water administration (such as general administration, office rents, office materials and supplies, and services of other City departments benefitting to both power and water) are Joint administrative and general costs and are reallocated as 55 percent Power-Related and 45 percent Water-Related.

3. **Property Taxes.** This category consists of property taxes levied against property owned by San Francisco in Tuolumne, Stanislaus, San Joaquin, and Alameda counties and operated and managed by the Hetch Hetchy Enterprise.

Allocation: Property taxes are classified as Joint costs. They will be reallocated as 55 percent Power-Related and 45 percent Water-Related.

C. **Calculation of Wholesale Customers' Share of Hetch Hetchy Enterprise Expenses.** The Water Enterprise's share of Hetch Hetchy Enterprise expenses consist of 100 percent of Water-Only expenses and the Water-Related portion (45%) of Joint expenses.

The Wholesale Customers' share of the sum of the Water Enterprise's share of Hetch Hetchy Enterprise expenses determined under subsection B shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

5.09. Hetch Hetchy Enterprise Capital Costs

A. **Introduction.** Wholesale Customers are also allocated a share of Hetch Hetchy Enterprise capital costs.

B. **Components of Capital Costs.** The components of Hetch Hetchy Enterprise capital costs are as follows:

1. Existing Assets Cost Recovery. The Wholesale Customers' repayment of their share of Hetch Hetchy Existing Assets (Water-Only and the Water-Related portion [45 percent] of Joint assets) is shown on Attachment K-4 accompanying Section 5.03.

2. Debt Service on New Assets. The Water Enterprise will be assigned 100 percent of Net Annual Debt Service attributable to acquisition and construction of New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of Net Annual Debt Service on New Hetch Hetchy Enterprise Joint assets. The provisions of Section 5.04.A apply to debt service on New Hetch Hetchy Enterprise assets.

3. Revenue-Funded Capital Additions. The Water Enterprise will be assigned 100 percent of capital expenditures from revenues for New Hetch Hetchy Enterprise assets that are Water-Only and the Water-Related portion (45 percent) of such expenditures for new Hetch Hetchy Enterprise Joint assets. The provisions of Section 5.04.B apply to the payment of New revenue-funded Hetch Hetchy Enterprise assets.

C. Calculation of Wholesale Customers' Share of Hetch Hetchy Enterprise Capital Costs. The Wholesale Customers' share of the Net Annual Debt Service and revenue funded capital expenditures determined under subsections B.2 and 3 shall be calculated by multiplying that dollar amount by Adjusted Proportional Annual Use.

5.10. Additional Agreements Related to Financial Issues

A. Wholesale Customers Not Entitled to Certain Revenues. The Wholesale Customers have no entitlement to any of the following sources of revenue to the SFPUC.

1. Revenues from leases or sales of SFPUC real property.
2. Revenues from the other utility services such as the sale of electric power, natural gas and steam.
3. Revenues from the sale of water to customers and entities other than the Wholesale Customers.
4. Revenues earned from the investment of SFPUC funds other than funds contributed by the Wholesale Customers to the Wholesale Revenue Coverage Reserve described in Section 6.06 or the Wholesale Capital Fund described in Section 6.08. Wholesale Customers are also entitled to the benefit of earnings on proceeds of Indebtedness (through

expenditure on New Regional Assets and /or application to Debt Service) and to interest on the Balancing Account as provided in Section 6.05.B.

5. Revenues not related to the sale of water.

B. **Wholesale Customers Not Charged with Certain Expenses**. The Wholesale Customers will not be charged with any of the following expenses:

1. Capital costs for assets constructed or acquired prior to July 1, 1984 other than Existing Asset costs that are repaid pursuant to Section 5.03.

2. Expenses incurred by the SFPUC for generation and distribution of electric power, including Hetch Hetchy Enterprise Power-Only expenses and the Power-Related share of Hetch Hetchy Enterprise Joint expenses. An exception to this is Regional energy costs incurred by the Water Enterprise, for which Wholesale Customers are charged on the basis of Proportional Annual Use.

3. Expenses incurred by SFPUC in providing water to Retail Customers.

4. Expenses associated with the SFPUC's accruals or allocations for uncollectible Retail Water accounts.

5. Attorneys' fees and costs incurred by the Wholesale Customers that a court of competent jurisdiction orders San Francisco to pay as part of a final, binding judgment against San Francisco as provided in Section 8.03.B.2.

6. Any expenses associated with funding any reserves (other than the required Wholesale Revenue Coverage Reserve described in Section 6.06) accrued and not anticipated to be paid within one year unless such reserve is established by mutual agreement of the SFPUC and BAWSCA.

7. Any expenses accrued in respect to pending or threatened litigation, damage or personal injury claims or other loss contingencies unless projected to be paid within one year. Otherwise, such expenses will be charged to the Wholesale Customers when actually paid.

8. Any expense associated with installing, relocating, enlarging, removing or modifying meters and service connections at the request of an individual Wholesale Customer.

9. The Retail Customers' portion of any Environmental Enhancement Surcharges imposed to enforce the Interim Supply Limitation set forth in Section 4.04.

C. Revenues Not Credited to Payment of Wholesale Revenue Requirement.

The following payments by Wholesale Customers, individually or collectively, are not credited as Wholesale revenues for purposes of Section 6.05.B:

1. Payments by individual Wholesale Customers of the Environmental Enhancement Surcharge imposed to enforce the Interim Supply Limitation set forth in Section 4.04.
2. Payments of attorneys' fees and costs incurred by San Francisco that a court of competent jurisdiction orders the Wholesale Customers to pay as part of a final, binding judgment against the Wholesale Customers, as provided in Section 8.03.B.3.
3. Payments by individual Wholesale Customers for installation, relocation, enlargement, removal or modification of meters and service connections requested by, and charged to, a Wholesale Customer.
4. Payments applied to the amortization of the ending balance in the balancing account under the 1984 Agreement, pursuant to Section 6.05.A.
5. Payments of the Water Management Charge which are delivered to BAWSCA pursuant to Section 3.06.
6. Payments directed to the Wholesale Revenue Coverage Reserve pursuant to Section 6.06.
7. Prepayments authorized by Sections 5.03.C and 5.03.F.

D. Other

1. The Wholesale Customers will receive a proportional benefit from funds received by the SFPUC from (a) governmental grants, rebates, reimbursements or other subventions, (b) private-sector grants for Regional capital or operating purposes of the Water Enterprise and the Water-Only and Water-related portion of Joint Hetch Hetchy Water Enterprise expenses, or (c) a SFPUC use of taxable bonds.

2. The Wholesale Customers will receive a proportionate benefit from recovery of damages, including liquidated damages, by SFPUC from judgments against or settlements with contractors, suppliers, sureties, etc., related to Regional Water System projects and the Water-Only and Water-Related portion of Joint Hetch Hetchy Enterprise projects.

3. The SFPUC will continue to charge Wholesale Customers for assets acquired or constructed with proceeds of Indebtedness on which Wholesale Customers paid Debt Service during the Term of this Agreement on the “cash” basis (as opposed to the “utility” basis) after the expiration or earlier termination of this Agreement. The undertaking in this Section 5.10.D.3 will survive the expiration or earlier termination of this Agreement.

5.11. Classification of Existing System Assets.

Existing System Assets of the Regional Water System include the water storage, transmission, and treatment systems owned and operated by San Francisco in Tuolumne, Stanislaus, San Joaquin, Alameda, Santa Clara, San Mateo and San Francisco Counties. These assets are managed by either the Water Enterprise or the Hetch Hetchy Enterprise and the assets have been classified for purposes of cost allocation.

A. **Water Enterprise Assets.** Water Enterprise assets are currently managed, operated, and maintained by the Water Enterprise and are generally located west of Alameda East Portal, in addition to the treatment facilities located at Tesla and the Thomas Shaft Emergency Disinfection Facility. These assets are classified as Direct Retail, Direct Wholesale, or Regional.

B. **Hetch Hetchy Enterprise Assets.** Hetch Hetchy Enterprise assets are currently managed, operated and maintained by the Hetch Hetchy Enterprise and are generally located east of the Alameda East Portal of the Coast Range Tunnel in Sunol Valley, Alameda County. These assets are classified as Power-Only, Water-Only, or Joint, in accordance with Sections 5.08 and 5.09. Through the Wholesale Revenue Requirement, the Wholesale Customers pay Existing System Asset capital costs and operating expenses in accordance with Section 5.02.F and do not pay capital costs or operating expenses associated with assets classified as Direct Retail, Power-Only, and the Power-Related portion of Joint assets.

C. **Attachment R Documents Classifications.** To facilitate WSA administration, Attachment R documents the classification of major Existing System Assets operated by the Hetch Hetchy Enterprise. Attachment R consists of three documents: R-1 Introduction, R-2 Special Classification of Discrete Projects for 2018 Amendment Purposes, and R-3 Major Hetch Hetchy Enterprise Existing System Assets. Attachment R may be modified as specified in Section 5.11.D and in the manner set forth in Section 2.03.C.

D. **Attachment R-3, Major Hetch Hetchy Enterprise Existing System Assets is Not Exhaustive.** Existing System Assets include, but are not limited to, land; fixed infrastructure such as dams, tunnels, buildings, water treatment plants and pipelines; equipment such as pumps and vehicles; and related appurtenances. Major Hetch Hetchy Enterprise Existing System Assets, and their classifications, are listed in Attachment R-3. Attachment R-3 does not include all assets of the Regional Water System, but represents the parties' best efforts to document major Hetch Hetchy Enterprise Existing System Assets that would incur capital costs and operating expenses subject to cost allocation. The classification of assets listed on R-3 may not be changed during the Term, any Extension Term, and any renewal of the Agreement, however, Attachment R-3 may be modified by mutual agreement in accordance with Section 2.03.C to (1) add an asset that was inadvertently omitted, (2) to add a new asset, and (3) remove a destroyed or obsolete asset. In the event that the parties cannot agree on the classification of any omitted or new assets, the dispute shall be subject to arbitration under Section 8.01.

E. **Attachment R-3, Major Hetch Hetchy Enterprise Existing System Assets Classifications are Fixed.** The classification of the major Hetch Hetchy Enterprise Existing System Assets is fixed and shall control the allocation of capital costs and operating expenses for the remainder of the Term, any Extension Terms, and any renewal of the Agreement. However, changes may be proposed in accordance with subsection G below. Capital costs and operating expenses are meant to be inclusive of all costs related to assets, including, but not limited to, any alterations, additions, improvements, rehabilitation, replacement of assets, and equipment that is appurtenant thereto. Since asset classifications are fixed in Attachment R-3, asset classifications may not be modified by mutual agreement in accordance with Section 2.03.C.

F. **Attachment R-2, Special Classification of Discrete Projects for 2018 Amendment Purposes.** Past, ongoing and future capital projects involving five Hetch Hetchy Enterprise Existing System Assets defined in Attachment R-2 have classifications that differ from the underlying asset classifications. These project-related classification changes shown on Attachment R-2, are part of the 2018 amendments to the Agreement and are not precedential for any other asset-related capital cost or operating expense. With the exception of the defined projects related to the five assets listed on R-2, the capital projects for all assets follow the asset classifications. Capital projects listed on Attachment R-2 must be approved by the SFPUC following necessary CEQA review.

G. **Five Year Notice of Intent to Renegotiate Cost Allocation.** In the event San Francisco or the Wholesale Customers, which may be represented by BAWSCA, wish to propose and negotiate a change in Existing System Asset classifications, or a change in the Water-Related portion (45 percent) of Joint expenses, for the next Water Supply Agreement, such party must provide the other at least 5 years' written notice prior to the expiration of the Term or Extension Term, or the renewal of the Agreement. At a minimum, the noticing party must provide a comprehensive analysis of the financial and rate impacts of the proposed change at least two years prior to the expiration of the Term or Extension Term, or the renewal of the Agreement.

To meet this requirement, the parties may agree to jointly analyze, under a separate agreement, system capacity and usage and/or new assets, as well as other possible alternative cost allocation methodologies. Either party may also unilaterally initiate such studies by consultants of their choice and bear all their own costs.

Article 6. Integration of Wholesale Revenue Requirement with SFPUC Budget Development and Rate Adjustments

6.01. General

A. The purpose of the allocation bases set forth in Article 5 is to determine the Wholesale Revenue Requirement for each fiscal year. The Wholesale Revenue Requirement can only be estimated in advance, based on projected costs and water deliveries. These projections are used to establish water rates applicable to the Wholesale Customers.

B. After the close of each fiscal year, the procedures described in Article 7 will be used to determine the actual Wholesale Revenue Requirement for that year, based on actual costs incurred, allocated according to the provisions of Article 5, and using actual water delivery data. The amount properly allocated to the Wholesale Customers shall be compared to the amount billed to the Wholesale Customers for the fiscal year, other than those identified in Section 5.10.C. The difference will be entered into a balancing account to be charged to, or credited to, the Wholesale Customers, as appropriate.

C. The balancing account shall be managed as described in Section 6.05.

6.02. Budget Development

The SFPUC General Manager will send a copy of the proposed SFPUC budget to BAWSCA at the same time as it is sent to the Commission. In addition, a copy of materials submitted to the Commission for consideration at meetings prior to the meeting at which the overall SFPUC budget is considered (including (a) operating budgets for the Water Enterprise and the Hetch Hetchy Enterprise, (b) budgets for SFPUC Bureaus, and (c) capital budgets for the Water Enterprise and the Hetch Hetchy Enterprise) will also be sent to BAWSCA concurrently with their submission to the Commission.

6.03. Rate Adjustments

A. **Budget Coordinated Rate Adjustments.** Adjustments to the rates applicable to the Wholesale Customers shall be coordinated with the budget development process described in this section except to the extent that Sections 6.03.B and 6.03.C authorize emergency rate increases and drought rate increases, respectively.

If the SFPUC intends to increase wholesale water rates during the ensuing fiscal year, it will comply with the following procedures:

1. Adjustments to the wholesale rates will be adopted by the Commission at a regularly scheduled meeting or at special meeting, properly noticed, called for the purpose of adjusting rates or for taking any other action under the jurisdiction of the Commission.

2. The SFPUC will send a written notice by mail or electronic means to each Wholesale Customer and to BAWSCA of the recommended adjustment at least thirty (30) days prior to the date of the meeting at which the Commission will consider the proposed adjustment. The notice will include the date, time and place of the Commission meeting.

3. The SFPUC shall prepare and provide to each Wholesale Customer and to BAWSCA the following materials: (a) a table illustrating how the increase or decrease in the Wholesale Revenue Requirement and wholesale rates were calculated, substantially in the form of Attachment N-1, (b) a schedule showing the projected expenses included in the Wholesale Revenue Requirement for the fiscal year for which the rates are being proposed, and supporting materials, substantially in the form of Attachment N-2, and (c) a schedule showing projected water sales, Wholesale Revenue Requirements and wholesale rates for the fiscal year for which rates are being set and the following four years, substantially in the form of Attachment N-3. These materials will be included with the notification required by Section 6.03.A.2.

4. Rate adjustments will be effective no sooner than thirty (30) days after adoption of the wholesale rate by the Commission.

5. San Francisco will use its best efforts to provide the Wholesale Customers with the information described above. San Francisco's failure to comply with the requirements set forth in this section shall not invalidate any action taken by the Commission (including, but not limited to, any rate increase or decrease adopted). In the event of such failure, the Wholesale Customers may either invoke arbitration, as set forth in Section 8.01, or seek injunctive relief, to compel San Francisco to remedy the failure as soon as is reasonably practical, and San Francisco shall be free to oppose the issuance of the requested judicial or arbitral relief on any applicable legal or equitable basis. The existence of this right to resort to arbitration shall not be deemed to preclude the right to seek injunctive relief.

6. Because delays in the budget process or other events may cause San Francisco to defer the effective date of Wholesale Customer rate adjustments until after the beginning of San Francisco's fiscal year, nothing contained in this Agreement shall require San Francisco to make any changes in the water rates charged to Wholesale Customers effective at

the start of San Francisco's fiscal year or at any other specific date. Nothing in the preceding sentence shall excuse non-compliance with the provisions of Section 6.02 and this section.

B. **Emergency Rate Increases.** The Commission may adjust the Wholesale Customers' rates without complying with the requirements of Section 6.03.A in response to an Emergency that damages the Regional Water System and disrupts San Francisco's ability to maintain normal deliveries of water to Retail and Wholesale Customers. In such an Emergency, the Commission may adopt an emergency rate surcharge applicable to Wholesale Customers without following the procedures set forth in this section, provided that any such rate surcharge imposed by the Commission shall be applicable to both Retail and Wholesale Customers and incorporate the same percentage increase for all customers. Any emergency rate surcharge adopted by the Commission shall remain in effect only until the next-budget coordinated rate-setting cycle.

C. **Drought Rates.** If the Commission declares a water shortage emergency under Water Code Section 350, implements the Tier 1 Shortage Plan (Attachment H) described in Section 3.11.C, and imposes drought rates on Retail Customers, it may concurrently adjust wholesale rates independently of coordination with the annual budget process. Those adjustments may be designed to encourage water conservation and may constitute changes to the structure of the rates within the meaning of Section 6.04. The parties agree, however, that, in adopting changes in rates in response to a declaration of water shortage emergency, the Commission shall comply with Section 6.03.A.1 and 2 but need not comply with Section 6.04.B. Drought Rate payments and payments of excess use charges levied in accordance with the Tier 1 Shortage Plan described in Section 3.11.C constitute Wholesale Customer Revenue and count towards the Wholesale Revenue Requirement. The SFPUC may use these revenues to purchase additional water for the Wholesale Customers from the State Drought Water Bank or other willing seller.

6.04. Rate Structure

A. This Agreement is not intended and shall not be construed to limit the Commission's right (a) to adjust the structure of the rate schedule applicable to the Wholesale Customers (i.e., the relationship among the several charges set out therein) or (b) to add, delete, or change the various charges which make up the rate schedule, provided that neither such charges nor the structure of the rate schedule(s) applicable to the Wholesale Customers shall be arbitrary, unreasonable, or unjustly discriminatory as among said customers. The

SFPUC will give careful consideration to proposals for changes in the rate schedule made jointly by the Wholesale Customers but, subject to the limitations set out above, shall retain the sole and exclusive right to determine the structure of the rate schedule.

B. If the SFPUC intends to recommend that the Commission adopt one or more changes to the structure of wholesale rates (currently set forth in SFPUC Rate Schedule W-25), it shall prepare and distribute to the Wholesale Customers and BAWSCA a report describing the proposed change(s), the purpose(s) for which it/they are being considered, and the estimated financial effect on individual Wholesale Customers or classes of customers. Wholesale Customers may submit comments on the report to the SFPUC for sixty (60) days after receiving the report. The SFPUC will consider these comments and, if it determines to recommend that the Commission adopt the change(s), as described in the report or as modified in response to comments, the SFPUC General Manager shall submit a report to the Commission recommending specific change(s) in the rate structure. Copies of the General Manager's report shall be sent to all Wholesale Customers and BAWSCA at least thirty (30) days prior to the Commission meeting at which the changes will be considered.

C. The SFPUC may recommend, and the Commission may adopt, changes in the structure of wholesale rates at any time. However, the new rate schedule implementing these changes will become effective at the beginning of the following fiscal year.

6.05. Balancing Account

A. **Balancing Account Established Under 1984 Agreement.** The amount of credit in favor of San Francisco as of the expiration of the term of 1984 Agreement (June 30, 2009) is not known with certainty as of preparation and execution of this Agreement. It will not be known with certainty until the Compliance Audit for FY 2008-09 is completed and disputes, if any, that the Wholesale Customers or the SFPUC may have with the calculation of the Suburban Revenue Requirement for that fiscal year and for previous fiscal years have been settled or decided by arbitration.

The parties anticipate that the amount of the credit in favor of San Francisco as of June 30, 2009 may be within the range of \$15 million to \$20 million.

In order to reduce the credit balance due San Francisco under the 1984 Agreement in an orderly manner, while avoiding unnecessary fluctuations in wholesale rates, the parties agree to implement the following procedure.

1. In setting wholesale rates for FY 2009-10, SFPUC will include a balancing account repayment of approximately \$2 million.

2. In setting wholesale rates for FY 2010-11 and following years, SFPUC will include a balancing account repayment of not less than \$2 million and not more than \$5 million annually until the full amount of the balance due, plus interest at the rate specified in Section 6.05.B, is repaid.

3. The actual ending balance as of June 30, 2009 will be determined, by the parties' agreement or arbitral ruling, after the Compliance Audit report for FY 2008-09 is delivered to BAWSCA. That amount, once determined, will establish the principal to be amortized through subsequent years' repayments pursuant to this Section 6.05.A.

B. Balancing Account Under This Agreement

1. Operation. After the close of each fiscal year, the SFPUC will compute the costs allocable to the Wholesale Customers for that fiscal year pursuant to Article 5, based on actual costs incurred by the SFPUC and actual amounts of water used by the Wholesale Customers and the Retail Customers. That amount will be compared to the amounts billed to the Wholesale Customers for that fiscal year (including any Excess Use Charges, but excluding revenues described in Section 5.10.C). The difference will be posted to a "balancing account" as a credit to, or charge against, the Wholesale Customers. Interest shall also be posted to the balancing account calculated by multiplying the amount of the opening balance by the average net interest rate, certified by the Controller as earned in the San Francisco Treasury for the previous fiscal year on the San Francisco County Pooled Investment Account. Interest, when posted, will carry the same mathematical sign (whether positive or negative) as carried by the opening balance. The amount posted to the balancing account in each year shall be added to, or subtracted from, the balance in the account from previous years. The calculation of the amount to be posted to the balancing account shall be included in the report prepared by the SFPUC pursuant to Section 7.02.

The opening balance for fiscal year 2009-10 shall be zero.

2. Integration of Balancing Account with Wholesale Rate Setting Process. If the amount in the balancing account is owed to the Wholesale Customers (a positive balance), the SFPUC shall take it into consideration in establishing wholesale rates. However, the SFPUC need not apply the entire amount to reduce wholesale rates for the immediately ensuing

year. Instead, the SFPUC may prorate a positive ending balance over a period of up to three successive years in order to avoid fluctuating decreases and increases in wholesale rates.

a. If a positive balance is maintained for three successive years and represents 10 percent or more of the Wholesale Revenue Requirement for the most recent fiscal year, the SFPUC shall consult with BAWSCA as to the Wholesale Customers' preferred application of the balance. The Wholesale Customers shall, through BAWSCA, direct that the positive balance be applied to one or more of the following purposes: (a) transfer to the Wholesale Revenue Coverage Reserve, (b) amortization of any remaining negative balance from the ending balancing account under the 1984 Agreement, (c) prepayment of the existing asset balance under Section 5.03, (d) water conservation or water supply projects administered by or through BAWSCA, (e) immediate reduction of wholesale rates, or (f) continued retention for future rate stabilization purposes. In the absence of a direction from BAWSCA, the SFPUC shall continue to retain the balance for rate stabilization in subsequent years.

b. If the amount in the balancing account is owed to the SFPUC (a negative balance), the SFPUC shall not be obligated to apply all or any part of the negative balance in establishing wholesale rates for the immediately ensuring year. Instead, the SFPUC may prorate the negative balance in whole or in part over multiple years in order to avoid fluctuating increases and decreases in wholesale rates.

6.06. Wholesale Revenue Coverage Reserve

A. The SFPUC may include in wholesale rates for any fiscal year an additional dollar amount ("Wholesale Revenue Coverage"), which for any fiscal year shall equal the following:

1. The lesser of (i) 25% of the Wholesale Customers' share of Net Annual Debt Service for that fiscal year determined as described in Section 5.04.A, or (ii) the amount necessary to meet the Wholesale Customers' proportionate share of Debt Service coverage required by then-current Indebtedness for that fiscal year, minus

2. A credit for (i) the actual amounts previously deposited in the "Wholesale Revenue Coverage Reserve" (as defined in subsection B below), (ii) accrued interest on the amounts on deposit in the Wholesale Revenue Coverage Reserve, and (iii) an amount equal to any additional interest that would have accrued on the actual amounts previously deposited in the Wholesale Revenue Coverage Reserve assuming no withdrawals had been made therefrom.

B. During each fiscal year, the SFPUC will set aside and deposit that portion of revenue equal to Wholesale Revenue Coverage into a separate account that the SFPUC will establish and maintain, to be known as the "Wholesale Revenue Coverage Reserve." Deposits into the Wholesale Revenue Coverage Reserve shall be made no less frequently than monthly. The Wholesale Revenue Coverage Reserve shall be credited with interest at the rate specified in Section 6.05.B. The SFPUC may use amounts in the Wholesale Revenue Coverage Reserve for any lawful purpose. Any balance in the Wholesale Revenue Coverage Reserve in excess of the Wholesale Revenue Coverage amount as of the end of any fiscal year (as calculated in subsection 6.06(A) above) shall be applied as a credit against wholesale rates in the immediately following fiscal year unless otherwise directed by BAWSCA.

C. Within 180 days following the later of expiration of the Term or final payment of Debt Service due on Indebtedness issued during the Term to which Wholesale Customers were contributing, SFPUC shall rebate to the Wholesale Customers an amount equal to the Wholesale Revenue Coverage amount in effect for the fiscal year during which the Term expires or the final payment of Debt Service on Indebtedness is made based on each Wholesale Customer's Proportional Annual Use in the fiscal year during which the Term expires or the final payment of debt service on Indebtedness is made.

D. SFPUC shall provide a schedule of debt issuance (with assumptions), and the Wholesale Customers' share of Net Annual Debt Service (actual and projected) expected to be included in wholesale rates starting in 2009-10 through the expected completion of the WSIP. The schedule is to be updated annually prior to rate setting. If estimated Debt Service is used in rate setting, the SFPUC must be able to demonstrate that the Water Enterprise revenues will be sufficient to meet the additional bonds test for the proposed bonds and rate covenants for the upcoming year.

E. Conditions in the municipal bond market may change from those prevailing in 2009. If, prior to expiration of the Term, the SFPUC determines that it would be in the best financial interest of both Retail Customers and Wholesale Customers of the Regional Water System for the Debt Service coverage requirement to be increased in one or more series of proposed new Indebtedness above 1.25%, or for the coverage covenant to be strengthened in other ways, it will provide a written report to BAWSCA. The report will contain (1) a description of proposed covenant(s) in the bond indenture; (2) an explanation of how savings are expected to be achieved (e.g., increase in the SFPUC's credit rating over the then-current level; ability to

obtain credit enhancement, etc.); (3) the estimated all-in true interest cost savings; (4) a comparison of the Wholesale Revenue Requirements using the Debt Service coverage limitation in subsection A and under the proposed methodology; and (5) a comparison of the respective monetary benefits expected to be received by both Retail and Wholesale Customers. The SFPUC and BAWSCA agree to meet and confer in good faith about the proposed changes.

F. Any increase in Debt Service coverage proposed by the SFPUC shall be commensurate with Proportional Water Use by Retail and Wholesale Customers. If the SFPUC demonstrates that an increase in Debt Service coverage will result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, BAWSCA may agree to a modification of the Wholesale Revenue Coverage requirement in subsection A. If BAWSCA does not agree to a proposed modification in coverage requirements in the covenants for new Indebtedness, SFPUC may nevertheless proceed with the modification and the issuance of new Indebtedness. Any Wholesale Customer, or BAWSCA, may challenge an increase in the Wholesale Revenue Requirement resulting from the modification in Debt Service coverage through arbitration as provided in Section 8.01.A. If the arbitrator finds that the increase in Debt Service coverage (1) did not and will not result in equivalent percentage reductions in total Wholesale and Retail Debt Service payments over the life of the proposed new Indebtedness, based on Proportional Water Use, or (2) was not commensurate with Proportional Water Use, the arbitrator may order the Wholesale Revenue Requirement to be recalculated both retrospectively and prospectively to eliminate the differential impact to Wholesale or Retail Customers, subject to the limitation in Section 8.01.C.

6.07. Working Capital Requirement

A. The SFPUC maintains working capital in the form of unappropriated reserves for the purpose of bridging the gap between when the SFPUC incurs operating expenses required to provide service and when it receives revenues from its Retail and Wholesale Customers. The Wholesale Customers shall fund their share of working capital as part of the annual Wholesale Revenue Requirement calculation. The amount of wholesale working capital for which the Wholesale Customers will be responsible will be determined using the 60-day standard formula approach.

B. Applying this approach, annual wholesale working capital equals one-sixth of the wholesale allocation of operation and maintenance, administrative and general, and property tax

expenses for the Water and Hetch Hetchy Enterprises. Wholesale working capital shall be calculated separately for the Water and Hetch Hetchy Enterprises.

C. Each month, the sum of the Water Enterprise and Hetch Hetchy Enterprise working capital components will be compared with the ending balance in the Wholesale Revenue Coverage Reserve to determine if the Wholesale Customers provided the minimum required working capital. If the Wholesale Revenue Coverage Reserve is greater than the total Water Enterprise and Hetch Hetchy Enterprise working capital requirement, the Wholesale Customers will have provided their share of working capital. If the Wholesale Revenue Coverage Reserve is less than the total Water Enterprise and Hetch Hetchy Enterprise working capital requirement, the Wholesale Customers will be charged interest on the difference, which will be included in the adjustment to the Balancing Account under Section 6.05.B for the subsequent fiscal year.

6.08. Wholesale Capital Fund

A. The SFPUC currently funds revenue-funded capital projects through annual budget appropriations that are included in rates established for that fiscal year and transferred to a capital project fund from which expenditures are made. Consistent with the San Francisco Charter and Administrative Code, the SFPUC appropriates funds in advance of construction in order to maintain a positive balance in the capital project fund. The capital project fund also accrues interest and any unspent appropriations in excess of total project costs. It is the SFPUC's practice to regularly monitor the capital project fund balance to determine whether a surplus has accumulated, which can be credited against the next fiscal year's capital project appropriation.

B. The SFPUC shall establish a comparable Wholesale Revenue-Funded Capital Fund (Wholesale Capital Fund) to enable the Wholesale Customers to fund the wholesale share of revenue-funded New Regional Assets. The Wholesale Capital Fund balance is zero as of July 1, 2009. The SFPUC may include in wholesale rates for any fiscal year an amount equal to the wholesale share of the SFPUC's appropriation for revenue funded New Regional Assets for that year, which sum will be credited to the Wholesale Capital Fund. The wholesale share of other sources of funding, where legally permitted and appropriately accounted for under GAAP, will also be credited to the Wholesale Capital Fund, together with interest earnings on the Wholesale Capital Fund balance.

C. The SFPUC will expend revenues appropriated and transferred to the Wholesale Capital Fund only on New Regional Assets. The annual capital appropriation included in each fiscal year's budget will be provided to BAWSCA in accordance with Section 6.02 and will take into account the current and projected balance in the Wholesale Capital Fund, as well as current and projected unexpended and unencumbered surplus, as shown on attachment M-1, which will be prepared by the SFPUC each year.

D. Commencing on November 30, 2010 and thereafter in each fiscal year during the Term, the SFPUC will also provide an annual report to BAWSCA on the status of individual revenue-funded New Regional Assets, substantially in the form of Attachment M-2.

E. In order to prevent the accumulation of an excessive unexpended and unencumbered balance in the Wholesale Capital Fund, the status of the fund balance will be reviewed through the annual Compliance Audit, commencing in FY 2018-19. The FY 2018-19 Compliance Audit and the Wholesale Customer/BAWSCA review under Section 7.06 shall include Wholesale Capital Fund appropriations, expenditures and interest earnings for FY 2014-15 through 2017-18 for the purpose of determining whether a Balancing Account transfer is required. If the June 30 unencumbered balance of the Wholesale Capital Fund exceeds the lesser of the following: (i) the Target Balance; (ii) the unencumbered remaining cumulative appropriations, the amount of such excess shall be transferred to the credit of the Wholesale Customers to the Balancing Account described in Section 6.05.

In order to avoid funding delays for New Regional Asset capital projects resulting from prior year transfers of excess Wholesale Capital fund balances to the Wholesale Customers, if the June 30 unencumbered balance of the Wholesale Capital Fund is below the lesser of the following: (i) the Target Balance; (ii) the unencumbered remaining cumulative appropriation, such deficiency shall be posted to the Balancing Account described in Section 6.05 as a charge to the Wholesale Customers. Notwithstanding the foregoing, no such charge to the Wholesale Customers shall exceed \$4 million annually.

Amended Attachment M-3 illustrates the process for determining the Wholesale Capital Fund balance as of June 30, 2019.

F. Three years prior to the end of the Term, the SFPUC and BAWSCA will discuss the disposition of the Wholesale Capital Fund balance at the end of the Term. Absent

agreement, any balance remaining in the Wholesale Capital Fund at the end of the Term shall be transferred to the Balancing Account, to the credit of the Wholesale Customers.

6.09. SFPUC Adoption of Regional Water System 10-Year Capital Improvement Program

A. **Established Level of Service Goals and Objectives.** In approving the WSIP, the Commission adopted Level of Service Goals and Objectives that are, in part, used to develop capital programs related to water, including the 10-Year Capital Improvement Program for the Regional Water System (“10-Year CIP”). BAWSCA and the Wholesale Customers shall have the opportunity to review and provide written or oral comments on any changes to the Level of Service Goals and Objectives that may be submitted to the Commission for approval.

B. **Submittal of an Asset Management Policy.** Prior to December 31, 2020, the SFPUC shall develop and submit to the Commission for approval an Asset Management Policy applicable to the Regional Water System.

C. **Coordination of 10-Year CIP and SFPUC Budget Meetings.** The Commission annually reviews, updates, and adopts a 10-Year CIP pursuant to Section 8B.123 of the San Francisco Charter. At two-year intervals, the Commission holds two budget meetings concerning the 10-Year CIP. Over the course of the two budget meetings, the SFPUC reviews its budget priorities, potential changes to projects in the previously adopted 10-Year CIP, and the potential financial implications of such changes. In the event that Charter amendments are placed on the ballot that could alter or amend the City’s budget preparation and adoption efforts, BAWSCA shall be notified in advance of any proposed change that could result in a less robust CIP development effort, and BAWSCA and the SFPUC shall meet to consider BAWSCA’s comments on maintaining a robust CIP development effort.

D. **Mid-cycle Changes to the 10-Year CIP.** The SFPUC shall include within the Water Enterprise Capital Improvement Program Quarterly Projects Reports that it provides to the Commission (“CIP Quarterly Projects Reports”) discussion of any material changes proposed to projects that are included in the most recently adopted 10-Year CIP. The SFPUC defines a material change as a change that applies to a CIP project whose approved CIP budget is equal to or greater than \$5,000,000 that results in one or more of the following:

1. Increases the cost of the CIP project by more than 10%.
2. Increases the schedule of the CIP project by extending said schedule by 12 calendar months or greater.

3. Affects the SFPUC's ability to meet the Level of Service Goals and Objectives.

The SFPUC shall also include within the CIP Quarterly Projects Reports discussion of any new capital project that is not included in the most recently adopted 10-Year CIP if the SFPUC has 1) begun spending on the project and 2) anticipates that it will require total funding in excess of \$5,000,000. For such projects, the parties recognize that the work may be of an urgent nature and that details of those projects may be developing quickly to address a critical need. The SFPUC commits that, for these projects, an expanded discussion will be provided in quarterly reports generated 6 months following the creation of the project in the City's finance and accounting system. At a minimum, the discussion will include: 1) a detailed scope of work, 2) schedule, 3) cost breakdown, and 4) proposed source of funding. This level of detail shall continue to be included in subsequent quarterly reports through either the completion of the work or until the work is included as part of an adopted 10-Year CIP.

E. **BAWSCA and Wholesale Customer Notice and Review.** Beginning in 2020, at least 30 days before the first budget meeting, the SFPUC shall provide BAWSCA and the Wholesale Customers with written notice of the dates of the two budget meetings. At least 30 days before the first budget meeting, the SFPUC shall also provide BAWSCA and the Wholesale Customers with a draft of the 10-Year CIP and meet with those same parties to review potential candidate projects that it is considering for inclusion in the 10-Year CIP. Final materials for the first budget meeting will be made available to BAWSCA and the Wholesale Customers no less than 14 days prior to that budget meeting. Final materials for the second budget meeting will be made available to BAWSCA and the Wholesale Customers on the same date that they are made available to the Commission. Prior to the Commission's adoption of the 10-Year CIP at the second budget meeting, San Francisco shall respond, in writing, to all written comments by BAWSCA and the Wholesale Customers on the 10-Year CIP that were submitted prior to the date of the first budget meeting.

F. **Contents of Draft 10-Year CIP – Projects in Years One and Two of 10-Year Schedule.** The SFPUC's CIP projects generally fall into three categories: defined projects, placeholder concepts that could become projects, and programmatic spending for expenses likely to be made but for which there is no schedule. Projects in the near-term years of the 10-Year CIP have more definition than those in the outer years, and as a result more detailed information is available for them. For each project listed that has significant expected

expenditures identified in the first two years of the 10-Year CIP, the draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall include the following elements:

1. Project name.
2. Project description and justification.
3. Description of the project's relationship to the Level of Service Goals and Objectives.
4. Project asset classification for cost-allocation purposes, pursuant to Attachment R for Hetch Hetchy Enterprise assets, or as Regional or Retail for Water Enterprise assets.
5. Project schedule where applicable, broken down by phase, through to completion.
6. Total project budget estimate including a proposed inflation rate.

G. **Contents of Draft 10-Year CIP – Projects Listed After First Two Years of 10-Year Schedule.** For each project that is listed in years three through ten of the 10-Year CIP, the draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall include the following elements:

1. Project name.
2. Project description and justification.
3. Description of the project's relationship to the Level of Service Goals and Objectives.
4. Project asset classification for cost-allocation purposes, pursuant to Attachment R for Hetch Hetchy Enterprise assets, or as Regional or Retail for Water Enterprise assets.
5. Project schedule information that forms the basis for project planning if available.
6. Total project budget estimate.

H. **Additional Contents of Draft 10-Year CIP.** The draft 10-Year CIP made available to BAWSCA and the Wholesale Customers shall also include the following:

1. A discussion of any changes to projects in the previously adopted 10-Year CIP, the reasons for such changes, any impact of the proposed changes on the SFPUC's ability to achieve the Level of Service Goals

and Objectives, and the SFPUC's proposal for meeting the specific Level of Service Goals and Objectives in question.

2. A discussion of factors that have influenced the 10-Year CIP budget or identified projects, or have the potential to influence the overall budget or the number, cost and scale of identified projects, such as rate increase considerations, local rate setting policies, etc.
3. A discussion of how the CIP will be staffed.
4. A cash flow estimate for each project included as part of the first five years of the 10-Year CIP that considers historical spending and changes in the amount of work to be done.
5. Project spreadsheets that separate new projects from existing projects.
6. A summary roll-up for Regional costs, including all programmatic costs budgeted in the 10-Year CIP.

I. **Quarterly Reporting and Meetings.**

1. **CIP Quarterly Projects Reports.** The SFPUC shall include within the CIP Quarterly Projects Reports a detailed status update of each Regional project in the 10-Year CIP that has an estimated cost greater than \$5 million and a summary of the work completed to date for such projects. The CIP Quarterly Projects Reports shall focus on the first two years' projects in the 10-Year CIP, but shall also demonstrate a connection to the 10-Year CIP asset classification and the Level of Service Goals and Objectives. The CIP Quarterly Projects Reports shall identify any Regional project in the 10-Year CIP with an estimated cost greater than \$5 million that is behind schedule, and, for each project so identified, shall describe the SFPUC's plan and timeline for either making up the delay or adopting a revised project schedule. In each fourth quarter of the fiscal year CIP Quarterly Projects Report, the SFPUC will also address the status of Regional projects in the 10-Year CIP that have an estimated cost of less than \$5 million, noting any such projects that are behind schedule and describing the SFPUC's plan and timeline for either making up the delay or adopting a revised project schedule.

2. **Quarterly Meetings.** If requested by BAWSCA, the SFPUC shall hold quarterly meetings with BAWSCA to review each CIP Quarterly Projects Report, during which the SFPUC shall present information and detail about the individual projects and overall implementation of the 10-Year CIP, as well as the need for re-prioritization and/or the proposal

of new candidate projects for consideration as part of the next update of the 10-Year CIP. As part of the meeting held in each fourth quarter of the fiscal year, the SFPUC shall provide additional information and detail regarding the CIP development schedule and associated coordination proposed with BAWSCA.

Article 7. Accounting Procedures; Compliance Audit

7.01. SFPUC Accounting Principles, Practices

A. **Accounting Principles.** San Francisco will maintain the accounts of the SFPUC and the Water and Hetch Hetchy Enterprises in conformity with Generally Accepted Accounting Principles. San Francisco will apply all applicable pronouncements of the Governmental Accounting Standards Board (GASB) as well as statements and interpretations of the Financial Accounting Standards Board and Accounting Principles Board opinions issued on or before March 30, 1989, unless those pronouncements or opinions conflict with GASB pronouncements.

B. **General Rule.** San Francisco will maintain the accounting records of the SFPUC and the Water and Hetch Hetchy Enterprises in a format and level of detail sufficient to allow it to determine the annual Wholesale Revenue Requirement in compliance with this Agreement and to allow its determination of the Wholesale Revenue Requirement to be audited as provided in Section 7.04.

C. **Water Enterprise.** San Francisco will maintain an account structure which allows utility plant and operating and maintenance expenses to be segregated by location (inside San Francisco and outside San Francisco) and by function (Direct Retail, Regional and Direct Wholesale).

D. **Hetch Hetchy Enterprise.** San Francisco will maintain an account structure which allows utility plant and operating and maintenance expenses to be segregated into Water Only, Power Only and Joint categories.

E. **SFPUC.** San Francisco will maintain an account structure which allows any expenses of SFPUC bureaus that benefit only the Wastewater Enterprise, the Power-Only operations of the Hetch Hetchy Enterprise or Retail Customers to be excluded from the Wholesale Revenue Requirement.

F. **Utility Plant Ledgers.** San Francisco will maintain subsidiary plant ledgers for the Water and Hetch Hetchy Enterprises that contain unique identifying numbers for all assets included in the rate base and identify the original cost, annual depreciation, accumulated depreciation, date placed in service, useful life, salvage value if any, source of funding (e.g., bond series, revenues, grants), and classification for purposes of this Agreement.

G. **Debt.** San Francisco will maintain documentation identifying:

1. The portion of total bonded debt outstanding related to each series of each bond issue.
2. The portion of total interest expense related to each series of each bond issue.
3. The use of proceeds of each bond issue (including proceeds of commercial paper and/or other interim financial instruments redeemed or expected to be redeemed from bonds and earnings on the proceeds of financings) in sufficient detail to determine, for each bond issue, the proceeds and earnings of each (including proceeds and earnings of interim financing vehicles redeemed by a bond issue) and the total amounts expended on Direct Retail improvements and the total amounts expended on Regional improvements.

H. **Changes in Accounting.** Subject to subsections A thru G, San Francisco may change the chart of accounts and accounting practices of the SFPUC and the Water and Hetch Hetchy Enterprises. However, the allocation of any expense to the Wholesale Customers that is specified in the Agreement may not be changed merely because of a change in (1) the accounting system or chart of accounts used by SFPUC, (2) the account to which an expense is posted or (3) a change in the organizational structure of the SFPUC or the Water or Hetch Hetchy Enterprises.

I. **Audit.** San Francisco will arrange for an audit of the financial statements of Water and Hetch Hetchy Enterprises to be conducted each year by an independent certified public accountant, appointed by the Controller, in accordance with Generally Accepted Auditing Standards.

7.02. Calculation of and Report on Wholesale Revenue Requirement

A. Within five months after the close of each fiscal year, San Francisco will prepare a report showing its calculation of the Wholesale Revenue Requirement for the preceding fiscal year and the change in the balancing account as of the end of that fiscal year. The first such report will be prepared by November 30, 2010 and will cover fiscal year 2009-10 and the balancing account as of June 30, 2010.

B. The report will consist of the following items:

1. Statement of changes in the balancing account for the fiscal year being reported on, and for the immediately preceding fiscal year, substantially in the form of Attachment O.
2. Detailed supporting schedules 8.1 through 8.2 substantially in the form of Attachment N-2.
3. Description and explanation of any changes in San Francisco's accounting practices from those previously in effect.
4. Explanation of any line item of expense (shown on Attachment N-2, schedules 1 and 4) for which the amount allocated to the Wholesale Customers increased by (a) ten percent or more from the preceding fiscal year, or (b) more than \$1,000,000.
5. Representation letter signed by the SFPUC General Manager and by other SFPUC financial staff shown on Attachment P, as the General Manager may direct, subject to change in position titles at the discretion of the SFPUC.

C. The report will be delivered to the BAWSCA General Manager by the date identified in Subsection A.

Once the report has been delivered to BAWSCA, San Francisco will, upon request:

1. Provide BAWSCA with access to, and copies of, all worksheets and supporting documents used or prepared by San Francisco during its calculation of the Wholesale Revenue Requirement;
2. Make available to BAWSCA all supporting documentation and calculations used by San Francisco in preparing the report; and
3. Promptly provide answers to questions from BAWSCA staff about the report.

7.03. Appointment of Compliance Auditor

A. **Purpose.** The purpose of this section is to provide for an annual Compliance Audit by an independent certified public accountant of the procedures followed and the underlying data used by San Francisco in calculating the Wholesale Revenue Requirement for the preceding fiscal year. The annual Compliance Audit shall also determine whether the Wholesale Revenue Requirement has been calculated in accordance with the terms of the Agreement and whether amounts paid by the Wholesale Customers in excess of or less than

the Wholesale Revenue Requirement have been posted to the balancing account, together with interest as provided in Section 6.05.

B. **Method of Appointment.** The Controller shall select an independent certified public accountant ("Compliance Auditor") to conduct the Compliance Audit described below. The Compliance Auditor may be the same certified public accountant engaged by the Controller to audit the financial statements of the Water and Hetch Hetchy Enterprises. Subject to approval by the Controller and the General Manager of the SFPUC, the Compliance Auditor shall have the authority to engage such consultants as it deems necessary or appropriate to assist in the audit. The terms of this Article shall be incorporated into the contract between San Francisco and the Compliance Auditor, and the Wholesale Customers shall be deemed to be third-party beneficiaries of said contract.

7.04. Conduct of Compliance Audit

A. **Standards.** The Compliance Auditor shall perform the Compliance Audit in accordance with Generally Accepted Auditing Standards. In particular, its review shall be governed by the standards contained in Section AU 623 (Reports on Specified Elements, Accounts or Items of a Financial Statement) of the AICPA, Professional Standards, as amended from time to time.

B. **Preliminary Meeting; Periodic Status Reports; Access to Data.** Prior to commencing the audit, the Compliance Auditor shall meet with San Francisco and BAWSCA to discuss the audit plan, the procedures to be employed and the schedule to be followed. During the course of the audit, the Compliance Auditor shall keep San Francisco and BAWSCA informed of any unforeseen problems or circumstances which could cause a delay in the audit or any material expansion of the audit's scope. The Compliance Auditor shall be given full access to all records of the SFPUC and the Water and Hetch Hetchy Enterprises that the Auditor deems necessary for the audit.

C. **Audit Procedures.** The Compliance Auditor shall review San Francisco's calculation of the Wholesale Revenue Requirement and the underlying data in order to carry out the purpose of the audit described in Section 7.03.A and to issue the report described in Section 7.05. At a minimum, the Compliance Auditor shall address the following:

1. **Water Enterprise Operating and Maintenance Expenses.** The Compliance Auditor shall review Water Enterprise cost ledgers to determine whether the

recorded operating and maintenance expenses fairly reflect the costs incurred, were recorded on a basis consistent with applicable Generally Accepted Accounting Principles, and were allocated to the Wholesale Customers as provided in this Agreement.

2. Water Enterprise Administrative and General Expenses. The Compliance Auditor shall review Water Enterprise cost ledgers and other appropriate financial records, including those of the SFPUC, to determine whether the recorded administrative and general expenses fairly reflect the costs incurred by or allocated to the Water Enterprise, whether they were recorded on a basis consistent with applicable Generally Accepted Accounting Principles, whether SFPUC charges were allocated to the Water Enterprise in accordance with this Agreement, and whether the amount of administrative and general expenses allocated to the Wholesale Customers was determined as provided by this Agreement.

3. Property Taxes. The Compliance Auditor shall review Water Enterprise cost ledgers to determine whether the amount of property taxes shown on the report fairly reflects the property tax expense incurred by San Francisco for Water Enterprise property outside of San Francisco and whether there has been deducted from the amount to be allocated (1) all taxes actually reimbursed to San Francisco by tenants of Water Enterprise property under leases that require such reimbursement and (2) any refunds received from the taxing authority. The Compliance Auditor also shall determine whether the amount of property taxes allocated to the Wholesale Customers was determined as provided in this Agreement.

4. Debt Service. The Compliance Auditor shall review SFPUC records to determine whether debt service, and associated coverage requirements, were allocated to the Wholesale Customers as provided in this Agreement.

5. Amortization of Existing Assets in Service as of June 30, 2009. The Compliance Auditor shall review both Water and Hetch Hetchy Enterprise records to determine whether the payoff amount for Existing Assets allocated to the Wholesale Customers as shown on Attachment K-1 through K-4 was calculated as provided in Section 5.03 of this Agreement.

6. Revenue-Funded Capital Appropriations/Expenditures. The Compliance Auditor shall review San Francisco's calculation of actual expenditures on the wholesale share of revenue-funded New Regional Assets and remaining unexpended and unencumbered project balances in the "Wholesale Capital Fund" described in Section 6.08, to determine whether the procedures contained in that section were followed.

7. Hetch Hetchy Expenses. The Compliance Auditor shall determine whether Hetch Hetchy Enterprise expenses were allocated to the Wholesale Customers as provided in this Agreement.

D. Use of and Reliance on Audited Financial Statements and Water Use Data

1. In performing the audit, the Compliance Auditor shall incorporate any adjustments to the cost ledgers recommended by the independent certified public accountant, referred to in Section 7.01.I, which audited the financial statements of the Water and Hetch Hetchy Enterprises. The Compliance Auditor may rely upon the work performed by that independent certified public accountant if the Compliance Auditor reviews the work and is willing to take responsibility for it as part of the compliance audit.

2. In performing the Compliance Audit and issuing its report, the Compliance Auditor may rely on water use data furnished by the Water Enterprise, regardless of whether the Wholesale Customers contest the accuracy of such data. The Compliance Auditor shall have no obligation to independently verify the accuracy of the water use data provided by San Francisco; however, the Compliance Auditor shall disclose in its report any information which came to its attention suggesting that the water use data provided by San Francisco are inaccurate in any significant respect.

E. Exit Conference. Upon completion of the audit, the Compliance Auditor shall meet with San Francisco and BAWSCA to discuss audit findings, including (1) any material weakness in internal controls and (2) adjustments proposed by the Compliance Auditor and San Francisco's response (i.e., booked or waived).

7.05. Issuance of Compliance Auditor's Report

A. San Francisco will require the Compliance Auditor to issue its report no later than nine months after the fiscal year under audit (i.e., March 31 of the following calendar year). The Compliance Auditor's report shall be addressed and delivered to San Francisco and BAWSCA. The report shall contain:

1. A statement that the Auditor has audited the report on the calculation of the Wholesale Revenue Requirement and changes in the balancing account, and supporting documents, prepared by San Francisco as required by Section 7.02.

2. A statement that the audit was conducted in accordance with auditing standards generally accepted in the United States of America, and that the audit provides a reasonable basis for its opinion.

3. A statement that in the Compliance Auditor's opinion the Wholesale Revenue Requirement was calculated by San Francisco in accordance with this Agreement and that the change in the balancing account shown in San Francisco's report was calculated as required by this Agreement and presents fairly, in all material respects, changes in and the balance due to (or from) the Wholesale Customers as of the end of the fiscal year under audit.

7.06. Wholesale Customer Review

A. One or more Wholesale Customers, or BAWSCA, may engage an independent certified public accountant (CPA) to conduct a review (at its or their expense) of San Francisco's calculation of the annual Wholesale Revenue Requirement and a review of changes in the balancing account.

B. If a Wholesale Customer or BAWSCA wishes such a review to be conducted it will provide written notice to SFPUC within 30 days of the date the Compliance Auditor's report is issued. The notice will identify the CPA or accounting/auditing firm that will conduct the review and the specific aspects of the Compliance Auditor's report that are the subject of the review. If more than one notice of review is received by the SFPUC, the requesting Wholesale Customers shall combine and coordinate their reviews and select a lead auditor to act on their behalf for the purposes of requesting documents and conducting on-site investigations.

C. San Francisco will cooperate with the CPA appointed by a Wholesale Customer or BAWSCA. This cooperation includes making requested records promptly available, making knowledgeable SFPUC personnel available to timely and truthfully answer the CPA's questions and directing the Compliance Auditor to cooperate with the CPA.

D. The Wholesale Customer's review shall be completed within 60 days after the date the Compliance Auditor's report is issued. At the conclusion of the review, representatives of San Francisco and BAWSCA shall meet to discuss any differences between them concerning San Francisco's compliance with Articles 5 or 6 of this Agreement during the preceding fiscal year or San Francisco's calculation of the Wholesale Revenue Requirement for the preceding fiscal year. If such differences cannot be resolved, the dispute shall be submitted to arbitration in accordance with Section 8.01.

Article 8. Other Agreements of the Parties

8.01. Arbitration and Judicial Review

A. **General Principles re Scope of Arbitration.** All questions or disputes arising under the following subject areas shall be subject to mandatory, binding arbitration and shall not be subject to judicial determination:

1. the determination of the Wholesale Revenue Requirement, which shall include both the calculations used in the determination and the variables used in those calculations;

2. the SFPUC's adherence to accounting practices and conduct of the Compliance Audit; and

3. the SFPUC's classification of new or omitted assets for purposes of determining the Wholesale Revenue Requirement.

All other questions or disputes arising under this Agreement shall be subject to judicial determination. Disputes about the scope of arbitrability shall be resolved by the courts.

B. **Demand for Arbitration.** If any arbitrable question or dispute should arise, any Wholesale Customer or the SFPUC may commence arbitration proceedings hereunder by service of a written Demand for Arbitration. Demands for arbitration shall set forth all of the issues to be arbitrated, the general contentions relating to those issues, and the relief sought by the party serving the Demand. Within 45 days after service of a Demand upon it, any Wholesale Customer or the SFPUC may serve a Notice of Election to become a party to the arbitration and a Response to the issues set forth in the Demand. The Response shall include the party's general contentions and defenses with respect to the claims made in the Demand, and may include any otherwise arbitrable claims, contentions and demands that concern the fiscal year covered by the Demand. If a timely Notice of Election and Response is not filed by any such entity, it shall not be a party to the arbitration but shall nonetheless be bound by the award of the arbitrator. If no party to this Agreement serves a timely Notice of Election and Response, the party seeking arbitration shall be entitled to the relief sought in its Demand for Arbitration without the necessity of further proceedings. Any claims not made in a Demand or Response shall be deemed waived.

If a Demand or Notice of Election is made by the SFPUC, it shall be served by personal delivery or certified mail to each Wholesale Customer at the address of such customer as set forth in the billing records of the SFPUC. If a Demand or Notice of Election is made by a Wholesale Customer, service shall be by certified mail or personal delivery to the General Manager, SFPUC, 525 Golden Gate Avenue, 13th Floor, San Francisco, California 94102, and to each of the other Wholesale Customers. If arbitration is commenced, the Wholesale Customers shall use their best efforts to formulate a single, joint position with respect thereto. In any event, with respect to the appointment of arbitrators, as hereinafter provided, all Wholesale Customers that take the same position as to the issues to be arbitrated shall jointly and collectively be deemed to be a single party.

C. **Limitations Period.** All Demands For Arbitration shall be served within twelve months of receipt by BAWSCA of the Wholesale Revenue Requirement Compliance Auditor's Report for that year. If a party fails to file a Demand within the time period specified in this subsection, that party waives all present and future claims with respect to the fiscal year in question. If no such Demand is served within the twelve month period specified above, the SFPUC's determination of the Wholesale Revenue Requirement for that year shall be final and conclusive. Whether any particular claim is barred by the twelve month limitations period provided for herein shall be for the arbitrator to determine. Prior to the expiration of the twelve month limitations period, the parties to the dispute may agree by written stipulation to extend the period by up to six additional months.

The Arbitrator may order the alteration or recalculation of underlying Water Enterprise and/or Hetch Hetchy Enterprise accounts or asset classifications. Such changes shall be used to calculate the Wholesale Revenue Requirement for the fiscal year in dispute and shall also be used to determine future Wholesale Revenue Requirements, if otherwise applicable, even though the existing entries in such accounts or the asset classifications, in whole or in part, predate the twelve month period described above, so long as a timely arbitration Demand has been filed in accordance with this subsection.

D. **Number and Appointment of Arbitrators.** All arbitration proceedings under this section shall be conducted by a single arbitrator, selected by the SFPUC and a designated representative of the Wholesale Customers or each group of Wholesale Customers that take the same position with respect to the arbitration, within 75 days after service of the Demand. If the parties to the arbitration cannot agree on an arbitrator within 75 days, any party may petition

the Marin County Superior Court for the appointment of an arbitrator pursuant to Code of Civil Procedure Section 1281.6 (or any successor provision).

E. **Guidelines for Qualifications of Arbitrators.** The Wholesale Customers and the SFPUC acknowledge that the qualifications of the arbitrator will vary with the nature of the matter arbitrated, but, in general, agree that such qualifications may include service as a judge or expertise in one or more of the following fields: public utility law, water utility rate setting, water system and hydraulic engineering, utility accounting methods and practices, and water system operation and management. The parties to the arbitration shall use their best efforts to agree in advance upon the qualifications of any arbitrator to be appointed by the Superior Court.

F. **Powers of Arbitrator; Conduct of Proceedings**

1. Except as provided in this section, arbitrations under this section shall be conducted under and be governed by the provisions of California Code of Civil Procedure Sections 1282.2 through 1284.2 (hereinafter, collectively, “Code sections”), and arbitrators appointed hereunder shall have the powers and duties specified by the Code sections.

2. Within the meaning of the Code sections, the term “neutral arbitrator” shall mean the single arbitrator selected by the parties to the arbitration.

3. Unless waived in writing by the parties to the arbitration, the notice of hearing served by the arbitrator shall not be less than 90 days.

4. The lists of witnesses (including expert witnesses), and the lists of documents (including the reports of expert witnesses) referred to in Code of Civil Procedure Section 1282.2 shall be mutually exchanged, without necessity of demand therefore, no later than 60 days prior to the date of the hearing, unless otherwise agreed in writing by the parties to the arbitration. Upon application of any party, or on his or her own motion, the arbitrator may schedule one or more prehearing conferences for the purposes of narrowing and/or expediting resolution of the issues in dispute. Strict conformity to the rules of evidence is not required, except that the arbitrator shall apply applicable law relating to privileges and work product. The arbitrator shall consider evidence that he or she finds relevant and material to the dispute, giving the evidence such weight as is appropriate. The arbitrator may limit testimony to exclude evidence that would be immaterial or unduly repetitive, provided that all parties are afforded the opportunity to present material and relevant evidence.

5. Within thirty days after the close of the arbitration hearing, or such other time as the arbitrator shall determine, the parties will submit proposed findings and a proposed remedy to the arbitrator. The parties may file objections to their adversary's proposed findings and remedy within a time limit to be specified by the arbitrator. The arbitrator shall not base his or her award on information not obtained at the hearing.

6. The arbitrator shall render a written award no later than twelve months after the arbitrator is appointed, either by the parties or by the court, provided that such time may be waived or extended as provided in Code of Civil Procedure Section 1283.8.

7. The provisions for discovery set forth in Code of Civil Procedure Section 1283.05 are incorporated into and made part of this Agreement, except that: (a) leave of the arbitrator need not be obtained for the taking of depositions, including the depositions of expert witnesses; (b) the provisions of Code of Civil Procedure Section 2034.010 et seq., relating to discovery of expert witnesses, shall automatically be applicable to arbitration proceedings arising under this Agreement without the necessity for a formal demand pursuant to Section 2034.210 and the date for the exchange of expert discovery provided by Sections 2034.260 and 2034.270 shall be not later than 60 days prior to the date for the hearing; and (c) all reports, documents, and other materials prepared or reviewed by any expert designated to testify at the arbitration shall be discoverable. In appropriate circumstances, the arbitrator may order any party to this Agreement that is not a party to the arbitration to comply with any discovery request.

8. For the purposes of allocation of expenses and fees, as provided in Code of Civil Procedure Section 1284.2, if any two or more Wholesale Customers join together in a single, joint position in the arbitration, those Wholesale Customers shall be deemed to be a single party. If any Wholesale Customer or customers join together with the SFPUC in a single joint position in the arbitration, those Wholesale Customers and the SFPUC together shall be deemed to be a single party.

9. Subject to any other limitations imposed by the Agreement, the arbitrator shall have power to issue orders mandating compliance with the terms of the Agreement or enjoining violations of the Agreement. With respect to any arbitration brought to redress a claimed wholesale overpayment to the SFPUC, the arbitrator's power to award monetary relief shall be limited to entering an order requiring that an adjustment be made in the amount posted to the balancing account for the fiscal year covered by the Demand.

10. All awards of the arbitrator shall be binding on the SFPUC and the Wholesale Customers regardless of the participation or lack thereof by any Wholesale Customer or the SFPUC as a party to the arbitration proceeding. The parties to an arbitration shall have the power to modify or amend any arbitration award by mutual consent. The arbitrator shall apply California law.

8.02. Attorneys' Fees

A. **Arbitration or Litigation Between San Francisco and Wholesale Customers Arising under the Agreement or Individual Water Sales Contracts.** Each party will bear its own costs, including attorneys' fees, incurred in any arbitration or litigation arising under this Agreement or the Individual Water Sales Contracts between San Francisco and the Wholesale Customers. Notwithstanding the foregoing, and subject to the limitations contained herein, the SFPUC may allocate to the Wholesale Customers as an allowable expense, utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses, any attorneys' fees and costs incurred by the SFPUC in connection with arbitration and/or litigation arising under this Agreement and/or the Individual Water Sales Contracts. Attorneys' fees incurred by the SFPUC for attorneys employed in the San Francisco City Attorney's office shall be billed at the hourly rates charged for the attorneys in question by the San Francisco City Attorney's Office to the SFPUC. Attorneys' fees incurred by the SFPUC for attorneys other than those employed in the San Francisco City Attorney's Office shall be limited to the hourly rates charged to the SFPUC for attorneys and paralegals with comparable experience employed in the San Francisco City Attorney's office and in no event shall exceed the highest hourly rate charged by any attorney or paralegal employed in the City Attorney's Office to the SFPUC.

B. **Arbitration or Litigation Outside of Agreement Concerning the SFPUC Water System or Reserved Issues**

1. The attorneys' fees and costs incurred by the SFPUC in litigation between San Francisco and one or more of the Wholesale Customers arising from matters outside of the Agreement, including, without limitation, litigation and/or arbitration concerning the issues specifically reserved in the Agreement, shall be allocated between the Retail Customers and the Wholesale Customers utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses.

2. If, in any litigation described in subsection B.1 above, attorneys' fees and costs are awarded to one or more of the Wholesale Customers as prevailing parties, the

SFPUC's payment of the Wholesale Customers' attorneys' fees and costs shall not be an allowable expense pursuant to subsection A.

3. If, in any litigation described in subsection B.1, the SFPUC obtains an award of attorneys' fees and costs as a prevailing party against one or more of the Wholesale Customers, any such award shall be reduced to offset the amount of the SFPUC's fees and costs, if any, that have already been paid by the Wholesale Customers in the current or any prior fiscal years pursuant to subsection B.1 and the provisions of Articles 5 and 6 of the Agreement.

4. Nothing contained in this Agreement, including this subsection, shall authorize a court to award attorneys' fees and costs to a prevailing party as a matter of contract and/or the provisions of Civil Code Section 1717, in litigation between San Francisco and one or more of the Wholesale Customers arising from matters outside of the Agreement, including, without limitation, litigation and/or arbitration concerning the issues specifically reserved in the Agreement.

C. **Attorneys Fees and Costs Incurred by the SFPUC in Connection with the Operation and Maintenance of the SFPUC Water Supply System.** All attorneys' fees and costs incurred by the SFPUC in connection with the operation and maintenance of the SFPUC's water supply system shall be allocated between Retail Customers and the Wholesale Customers utilizing the composite rate used for allocating other Water Enterprise administrative and general expenses.

8.03. Annual Meeting and Report

A. The parties wish to ensure that the Wholesale Customers may, in an orderly way, be informed of matters affecting the Regional Water System, including matters affecting the continuity and adequacy of their water supply from San Francisco.

For this purpose, the General Manager of the SFPUC shall meet annually with the Wholesale Customers and BAWSCA during the month of February, commencing February 2010. At these annual meetings, the SFPUC shall provide the Wholesale Customers a report on the following topics:

1. Capital additions under construction or being planned for the Regional Water System, including the status of planning studies, financing plans, environmental reviews, permit applications, etc.;

2. Water use trends and projections for Retail Customers and Wholesale Customers;
3. Water supply conditions and projections;
4. The status of any administrative proceedings or litigation affecting San Francisco's water rights or the SFPUC's ability to deliver water from the watersheds which currently supply the Regional Water System;
5. Existing or anticipated problems with the maintenance and repair of the Regional Water System or with water quality;
6. Projections of Wholesale Revenue Requirements for the next five years;
7. Any other topic which the SFPUC General Manager places on the agenda for the meeting;
8. Any topic which the Wholesale Customers, through BAWSCA, request be placed on the agenda, provided that the SFPUC is notified of the request at least 10 days before the meeting.

B. The General Manager of the SFPUC, the Assistant General Manager of the Water Enterprise, and the Assistant General Manager of Business Services-CFO will use their best efforts to attend the annual meetings. If one or more of these officers are unable to attend, they will designate an appropriately informed assistant to attend in their place.

8.04. 8.04 Administrative Matters Delegated to BAWSCA

A. The Wholesale Customers hereby delegate the authority and responsibility for performing the following administrative functions contemplated in this Agreement to BAWSCA:

1. Approval of calculations of Proportional Annual Water Use required by Section 3.14 and Attachment J, "Water Use Measurement and Tabulation";
2. Approval of amendments to Attachments J and K-3 and K-4, "25-Year Payoff Schedules for Existing Rate Base";
3. Agreement that the Water Meter and Calibration Procedures Manual to be prepared by the SFPUC may supersede some or all of the requirements in Attachment J, as described in Section 3.14;

4. Conduct of Wholesale Customer review of SFPUC's calculation of annual Wholesale Revenue Requirement/Change in Balancing Account described in Section 7.06;

5. Approval of an adjustment to Wholesale Revenue Coverage as described in Section 6.06.

B. A majority of the Wholesale Customers may, without amending this Agreement, delegate additional administrative functions to BAWSCA. To be effective, such expanded delegation must be evidenced by resolutions adopted by the governing bodies of a majority of the Wholesale Customers. In 2014, all twenty-six Wholesale Customers adopted resolutions delegating authority to BAWSCA to initiate, defend and settle arbitration for the matters that, pursuant to Section 8.01 of this Agreement, are subject to mandatory, binding arbitration.

C. Unless otherwise explicitly stated, the administrative authority delegated to BAWSCA may be exercised by the General Manager/CEO of BAWSCA, rather than requiring action by the BAWSCA Board of Directors. In addition, the Wholesale Customers may, with the consent of BAWSCA, delegate to BAWSCA the initiation, defense, and settlement of arbitration proceedings provided for in Section 8.01.

8.05. Preservation of Water Rights; Notice of Water Rights Proceedings

A. It is the intention of San Francisco to preserve all of its water rights, irrespective of whether the water held under such water rights is allocated under this Agreement. Nothing in this Agreement shall be construed as an abandonment, or evidence of an intent to abandon, any of the water rights that San Francisco presently possesses.

B. San Francisco shall use its best efforts to give prompt notice to BAWSCA of any litigation or administrative proceedings to which San Francisco is a party involving water rights to the Regional Water System. The failure of San Francisco to provide notice as required by this section, for whatever reason, shall not give rise to any monetary liability.

8.06. SFPUC Rules and Regulations

The sale and delivery of all water under this Agreement shall be subject to such of the "Rules and Regulations Governing Water Service to Customers" of the Water Enterprise adopted by the Commission, as those rules and regulations may be amended from time to time, as are (1) applicable to the sale and delivery of water to the Wholesale Customers, (2) reasonable, and (3) not inconsistent with either this Agreement or with an Individual Water

Sales Contract. The SFPUC will give the Wholesale Customers notice of any proposal to amend the Rules and Regulations in a manner that would affect the Wholesale Customers. The notice will be delivered at least thirty days in advance of the date on which the proposal is to be considered by the Commission and will be accompanied by the text of the proposed amendment.

8.07. Reservations of, and Limitations on, Claims

A. **General Reservation of Raker Act Contentions.** The 1984 Agreement resolved a civil action brought against San Francisco by certain of the Wholesale Customers. Plaintiffs in that action contended that they, and other Wholesale Customers that are municipalities or special districts, were “co-grantees” within the meaning of Section 8 of the Act and were entitled to certain rights, benefits and privileges by virtue of that status. San Francisco disputed those claims.

Nothing in this Agreement, or in the Individual Water Sales Contracts, shall be construed or interpreted in any way to affect the ultimate resolution of the controversy between the parties concerning whether any of the Wholesale Customers are “co-grantees” under the Act and, if so, what rights, benefits and privileges accrue to them by reason of that claimed status.

B. **Claims Reserved but not Assertable During Term or Portions Thereof.** The following claims, which San Francisco disputes, are reserved but may not be asserted during the Term (or portions thereof, as indicated):

1. The Wholesale Customers’ claim that the Act entitles them to water at cost.
2. The Wholesale Customers’ claim that San Francisco is obligated under the Act or state law to supply them with additional water in excess of the Supply Assurance. This claim may not be asserted unless and until San Francisco decides not to meet projected water demands of Wholesale Customers in excess of the Supply Assurance pursuant to Section 4.06.
3. The claim by San Jose and Santa Clara that they are entitled under the Act, or any other federal or state law, to permanent, non-interruptible status and to be charged rates identical to those charged other Wholesale Customers. This claim may not be asserted unless and until San Francisco notifies San Jose or Santa Clara that it intends to interrupt or terminate water deliveries pursuant to Section 4.05.

4. The Wholesale Customers' claim that the SFPUC is not entitled to impose a surcharge for lost power generation revenues attributable to furnishing water in excess of the Supply Assurance. This claim may not be asserted unless and until SFPUC furnishes water in excess of the Supply Assurance during the Term and also includes such a surcharge in the price of such water.

5. Claims by Wholesale Customers (other than San Jose and Santa Clara, whose service areas are fixed) that SFPUC is obligated under the Act or state law to furnish water, within their Individual Supply Guarantee, for delivery to customers outside their existing service area and that Wholesale Customers are entitled to enlarge their service areas to supply those customers. Such claims may be asserted only after compliance with the procedure set forth in Section 3.03, followed by SFPUC's denial of, or failure for six months to act on, a written request by a Wholesale Customer to expand its service area.

C. **Waived Activities.** The Wholesale Customers (and the SFPUC, where specified) will refrain from the following activities during the Term (or portions thereof, as specified):

1. The Wholesale Customers and the SFPUC will not contend before any court, administrative agency or legislative body or committee that the methodology for determining the Wholesale Revenue Requirement (or the requirements for (a) amortization of the ending balance under the 1984 Agreement, or (b) contribution to the Wholesale Revenue Coverage) determined in accordance with this Agreement violates the Act or any other provision of federal law, state law, or San Francisco's City Charter, or is unfair, unreasonable or unlawful.

2. The Wholesale Customers will not challenge the transfer of funds by the SFPUC to any other San Francisco City department or fund, provided such transfer complies with the San Francisco City Charter. The transfer of its funds, whether or not permitted by the City Charter, will not excuse the SFPUC from its failure to perform any obligation imposed by this Agreement.

3. The Wholesale Customers and the SFPUC will not assert monetary claims against one another based on the 1984 Agreement other than otherwise arbitrable claims arising from the three fiscal years immediately preceding the start of the Term (i.e., FYs 2006-07, 2007-08 and 2008-09). Such claims, if any, shall be governed by the dispute resolution provisions of this Agreement, except that the time within which arbitration must be commenced shall be 18 months from delivery of the Compliance Auditor's report.

D. **Other**

1. This Agreement shall determine the respective monetary rights and obligations of the parties with respect to water sold by the SFPUC to the Wholesale Customers during the Term. Such rights and obligations shall not be affected by any judgments or orders issued by any court in litigation, whether or not between parties hereto, and whether or not related to the controversy over co-grantee status, except for arbitration and/or litigation expressly permitted in this Agreement. No judicial or other resolution of issues reserved by this section will affect the Wholesale Revenue Requirement which, during the Term, will be determined exclusively as provided in Articles 5, 6 and 7 of this Agreement.

2. Because delays in the budget process or other events may cause the SFPUC to defer the effective date of changes in wholesale rates until after the beginning of the fiscal year, this Agreement does not require the SFPUC to make changes in wholesale rates effective at the start of the fiscal year or at any other specific date.

3. The Wholesale Customers do not, by executing this Agreement, concede the legality of the SFPUC's establishing Interim Supply Allocations, as provided in Article 4 or imposing Environmental Enhancement Surcharges on water use in excess of such allocations. Any Wholesale Customer may challenge such allocation when imposed and/or such surcharges if and when levied, in any court of competent jurisdiction.

4. The furnishing of water in excess of the Supply Assurance by San Francisco to the Wholesale Customers shall not be deemed or construed to be a waiver by San Francisco of its claim that it has no obligation under any provision of law to supply such water to the Wholesale Customers, nor shall it constitute a dedication by San Francisco to the Wholesale Customers of such water.

8.08. Prohibition of Assignment

A. This Agreement shall be binding on, and shall inure to the benefit of, the parties and their respective successors and permitted assigns. Each Wholesale Customer agrees that it will not transfer or assign any rights or privileges under this Agreement, either in whole or in part, or make any transfer of all or any part of its water system or allow the use thereof in any manner whereby any provision of this Agreement will not continue to be binding on it, its assignee or transferee, or such user of the system. Any assignment or transfer in violation of this covenant, and any assignment or transfer that would result in the supply of water in violation of the Act, shall be void.

B. Nothing in this section shall prevent any Wholesale Customer (except the California Water Service Company and Stanford) from entering into a joint powers agreement or a municipal or multi-party water district with any other Wholesale Customer (except the two listed above) to exercise the rights and obligations granted to and imposed upon the Wholesale Customers hereunder, nor shall this section prevent any Wholesale Customer (except the two listed above) from succeeding to the rights and obligations of another Wholesale Customer hereunder as long as the Wholesale Service Area served by the Wholesale Customers involved in the succession is not thereby enlarged.

8.09. Notices

A. All notices and other documents that San Francisco is required or permitted to send to the Wholesale Customers under this Agreement shall be sent to each and all of the Wholesale Customers by United States mail, first class postage prepaid, addressed to each Wholesale Customer at the address to which monthly water bills are mailed by the Water Enterprise.

B. All notices or other documents which the Wholesale Customers are required or permitted to send to San Francisco under this Agreement shall be sent by United States mail, first class postage prepaid, addressed as follows:

General Manager
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94123

C. Each Wholesale Customer is a member of BAWSCA. San Francisco shall send a copy of each notice or other document which it is required to send to all Wholesale Customers to BAWSCA addressed as follows:

General Manager/CEO
Bay Area Water Supply and Conservation Agency
155 Bovet Road, Suite 650
San Mateo, CA 94402

The failure of San Francisco to send a copy of such notices or documents to BAWSCA shall not invalidate any rate set or other action taken by San Francisco.

D. Any party (or BAWSCA) may change the address to which notice is to be sent to it under this Agreement by notice to San Francisco (in the case of a change desired by a Wholesale Customer or BAWSCA) and to the Wholesale Customer and BAWSCA (in the case of a change desired by San Francisco).

The requirements for notice set forth in Section 8.01 concerning arbitration shall prevail over this section, when they are applicable.

8.10. Incorporation of Attachments

Attachments A through R, referred to herein, are incorporated in and made a part of this Agreement.

8.11. Interpretation

In interpreting this Agreement, or any provision thereof, it shall be deemed to have been drafted by all signatories, and no presumption pursuant to Civil Code Section 1654 may be invoked to determine the Agreement's meaning. The marginal headings and titles to the sections and paragraphs of this Agreement are not a part of this Agreement and shall have no effect upon the construction or interpretation of any part hereof.

8.12. Actions and Approvals by San Francisco

Whenever action or approval by San Francisco is required or contemplated by this Agreement, authority to act or approve shall be exercised by the Commission, except if such action is required by law to be taken, or approval required to be given, by the San Francisco Board of Supervisors. The Commission may delegate authority to the General Manager in accordance with the San Francisco City Charter and Administrative Code, except for actions that this Agreement requires to be taken by the Commission.

8.13. Counterparts

Execution of this Agreement may be accomplished by execution of separate counterparts by each signatory. San Francisco shall deliver its executed counterpart to BAWSCA and the counterpart which each Wholesale Customer executes shall be delivered to San Francisco. The separate executed counterparts, taken together, shall constitute a single agreement.

8.14. Limitations on Damages

A. Unless otherwise prohibited by this Agreement, general or direct damages may be recovered for a breach of a party's obligations under this Agreement. No party is liable for, or may recover from any other party, special, indirect or consequential damages or incidental damages, including, but not limited to, lost profits or revenue. No damages may be awarded for a breach of Section 8.17.

B. The limitations in subsection A apply only to claims for damages for an alleged breach of this Agreement. These limitations do not apply to claims for damages for an alleged breach of a legal duty that arises independently of this Agreement, established by constitution or statute.

C. If damages would be an inadequate remedy for a breach of this Agreement, equitable relief may be awarded by a court in a case in which it is otherwise proper.

D. This section does not apply to any claim of breach for which arbitration is the exclusive remedy pursuant to Section 8.01.A.

8.15. Force Majeure

A. **Excuse from Performance.** No party shall be liable in damages to any other party for delay in performance of, or failure to perform, its obligations under this Agreement, including the obligations set forth in Sections 3.09 and 4.06, if such delay or failure is caused by a "Force Majeure Event."

B. **Notice.** The party claiming excuse shall deliver to the other parties a written notice of intent to claim excuse from performance under this Agreement by reason of a Force Majeure Event. Notice required by this section shall be given promptly in light of the circumstances, and, in the case of events described in (c), (d) or (e) of the definition of Force Majeure Event only, not later than ten (10) days after the occurrence of the Force Majeure Event. Such notice shall describe the Force Majeure Event, the services impacted by the claimed event, the length of time that the party expects to be prevented from performing, and the steps which the party intends to take to restore its ability to perform.

C. **Obligation to Restore Ability to Perform.** Any suspension of performance by a party pursuant to this section shall be only to the extent, and for a period of no longer duration

than, required by the nature of the Force Majeure Event, and the party claiming excuse shall use its best efforts to remedy its inability to perform as quickly as possible.

8.16. No Third-Party Beneficiaries

This Agreement is exclusively for the benefit of the parties and not for the benefit of any other Person. There are no third-party beneficiaries of this Agreement and no person not a party shall have any rights under or interests in this Agreement.

No party may assert a claim for damages on behalf of a person other than itself, including a person that is not a party.

8.17. Good Faith and Fair Dealing

San Francisco and the Wholesale Customers each acknowledge their obligation under California law to act in good faith toward, and deal fairly with, each other with respect to this Agreement.

Article 9. Implementation and Special Provisions Affecting Certain Wholesale Customers

9.01. 9.01 General; Individual Water Sales Contracts

A. As described in Section 1.03, San Francisco previously entered into Individual Water Sales Contracts with each of the Wholesale Customers. The term of the majority of Individual Water Sales Contracts will expire on June 30, 2009, concurrently with the expiration of the 1984 Agreement. Except as provided below in this Article, each of the Wholesale Customers will execute a new Individual Water Sales Contract with San Francisco concurrently with its approval of the Agreement.

B. The Individual Water Sales Contracts will describe the service area of each Wholesale Customer, identify the location and size of connections between the Regional Water System and the Wholesale Customer's distribution system, provide for periodic rendering and payment of bills for water usage, and in some instances contain additional specialized provisions unique to the particular Wholesale Customer and not of general concern or applicability. A sample Individual Water Sales Contract is provided at Attachment F. The Individual Water Sales Contracts between San Francisco and the Wholesale Customers will not contain any provision inconsistent with Articles 1 through 8 of this Agreement except (1) as provided below in this Article or (2) to the extent that such provisions are not in derogation of the Fundamental Rights of other Wholesale Customers under this Agreement. Any provisions in an Individual Water Sales Contract which are in violation of this section shall be void.

9.02. California Water Service Company

A. The parties recognize that the California Water Service Company is an investor-owned utility company and, as such, has no claim to co-grantee status under the Act, which specifically bars private parties from receiving for resale any water produced by the Hetch Hetchy portion of the Regional Water System. Accordingly, the following provisions shall apply to the California Water Service Company, notwithstanding anything to the contrary elsewhere in this Agreement.

B. The total quantity of water delivered by San Francisco to the California Water Service Company shall not in any calendar year exceed 47,400 acre feet, which is the estimated average annual production of Local System Water. If San Francisco develops additional Local System Water after the Effective Date, it may (1) increase the maximum

delivery amount stated herein; and (2) increase the Supply Assurance, but not necessarily both. San Francisco has no obligation to deliver water to California Water Service Company in excess of the maximum stated herein, except as such maximum may be increased by San Francisco pursuant to this subsection. The maximum annual quantity of Local System Water set forth in this subsection is intended to be a limitation on the total quantity of water that may be allocated to California Water Service Company, and is not an Individual Supply Guarantee for purposes of Section 3.02. The maximum quantity of Local System Water set forth in this subsection is subject to reduction in response to (1) changes in long-term hydrology or (2) environmental water requirements that may be imposed by or negotiated with state and federal resource agencies in order to comply with state or federal law or to secure applicable permits for construction of Regional Water System facilities. San Francisco shall notify California Water Service Company of any anticipated reduction of the quantity of Local System Water set forth in this subsection, along with an explanation of the basis for the reduction.

C. Notwithstanding anything in Section 8.08 to the contrary, California Water Service Company shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of California Water Service Company under any contract between it and San Francisco applicable to any individual district of California Water Service Company in connection with the acquisition by such public agency of all or a portion of the water system of California Water Service Company in such district. In the event of any such assignment of all the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of all further obligations under such contract provided that the assignee public agency expressly assumes the obligations of California Water Service Company thereunder. In the event of such an assignment of a portion of the rights, privileges and obligations of California Water Service Company under such contract, California Water Service Company shall be relieved of such portion of such obligations so assigned thereunder provided that the assignee public agency shall expressly assume such obligations so assigned to it.

D. Should California Water Service Company seek to take over or otherwise acquire, in whole or in part, the service obligations of another Wholesale Customer under Section 3.03.E, it will so inform San Francisco at least six months prior to the effective date of the sale and provide information concerning the total additional demand proposed to be served, in order that San Francisco may compare the proposed additional demand to the then-current estimate of Local System Water. In this regard, California Water Service Company has notified

the SFPUC that it has reached an agreement to acquire the assets of Skyline County Water District ("Skyline") and assume the responsibility for providing water service to customers in the Skyline service area. California Water Service Company has advised the SFPUC that, on September 18, 2008, the California Public Utilities Commission approved California Water Service Company's acquisition of Skyline. The SFPUC anticipates approving the transfer of Skyline's Supply Guarantee as shown on Attachment C to California Water Service Company and the expansion of California Water Service Company's service area to include the current Skyline service area before the Effective Date of this Agreement. All parties to this Agreement authorize corresponding modifications of Attachment C, as well as any of the Agreement's other provisions, to reflect the foregoing transaction without the necessity of amending this Agreement.

E. Nothing in this Agreement shall preclude San Francisco from selling water to any county, city, town, district, political subdivision, or other public agency for resale to customers within the service area of the California Water Service Company. Nothing in this Agreement shall require or contemplate any delivery of water to California Water Service Company in violation of the Act.

F. Nothing in this Agreement shall alter, amend or modify the Findings of Fact and Conclusions of Law and the Judgment dated May 25, 1961, in that certain action entitled City and County of San Francisco v. California Water Service Company in the Superior Court of the State of California in and for the County of Marin, No. 23286, as modified by the Quitclaim Deed from California Water Service Company to San Francisco dated August 22, 1961. The rights and obligations of San Francisco and California Water Service Company under these documents shall continue as therein set forth.

9.03. City of Hayward

A. San Francisco and the City of Hayward ("Hayward") entered into a water supply contract on February 9, 1962 ("the 1962 contract") which provides, inter alia, that San Francisco will supply Hayward with all water supplemental to sources and supplies of water owned or controlled by Hayward as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1962 contract "on a permanent basis." The service area map attached as Exhibit C to the 1962 contract was amended in 1974 to remove an area of land in the Hayward hills and in 2008 to make minor boundary adjustments identified in SFPUC Resolution No. 08-0035.

B. The intention of the parties is to continue the 1962 contract, as amended, in effect as the Individual Water Sales Contract between San Francisco and Hayward. Accordingly, it shall not be necessary for San Francisco and Hayward to enter into a new Individual Water Sales Contract pursuant to this Article and approval of this Agreement by Hayward shall constitute approval of both this Agreement and an Individual Water Sales Contract for purposes of Section 1.03. The 1962 contract, as amended, will continue to describe the service area of Hayward, while rates for water delivered to Hayward during the Term shall be governed by Article 5 hereof. The 1962 contract, as amended, will continue in force after the expiration of the Term.

9.04. Estero Municipal Improvement District

A. San Francisco and the Estero Municipal Improvement District ("Estero") entered into a water supply contract on August 24, 1961, the term of which continues until August 24, 2011 ("the 1961 Contract"). The 1961 Contract provides, inter alia, that San Francisco will supply Estero with all water supplemental to sources and supplies of water owned or controlled by Estero as of that date, in sufficient quantity to supply the total water needs of the service area described on an exhibit to the 1961 Contract.

B. The intention of the parties is to terminate the 1961 Contract and replace it with a new Individual Water Sales Contract which will become effective on July 1, 2009. The new Individual Water Sales Contract will describe the current service area of Estero. The Individual Supply Guarantee applicable to Estero shall be 5.9 MGD, rather than being determined as provided in the 1961 Contract.

9.05. Stanford University

A. The parties recognize that The Board of Trustees of The Leland Stanford Junior University ("Stanford") operates a non-profit university, and purchases water from San Francisco for redistribution to the academic and related facilities and activities of the university and to residents of Stanford, the majority of whom are either employed by or students of Stanford. Stanford agrees that all water furnished by San Francisco shall be used by Stanford only for domestic purposes and those directly connected with the academic and related facilities and activities of Stanford, and no water furnished by San Francisco shall be used in any area now or hereafter leased or otherwise used for industrial purposes or for commercial purposes

other than those campus support facilities that provide direct services to Stanford faculty, students or staff such as the U.S. Post Office, the bookstore and Student Union.

Nothing in this Agreement shall preclude San Francisco from selling water to any county, city, town, political subdivision or other public agency for resale to Stanford or to customers within the service area of Stanford.

B. Notwithstanding anything in Section 8.08 to the contrary, Stanford shall have the right to assign to a public agency having the power of eminent domain all or a portion of the rights of Stanford under this Agreement or the Individual Water Sales Contract between it and San Francisco in connection with the acquisition by such public agency of all or a portion of Stanford's water system. In the event of any such assignment of all the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of all further obligations under such contract, provided that the assignee public agency expressly assumes Stanford's obligations thereunder. In the event of such an assignment of a portion of the rights, privileges, and obligations of Stanford under such contract, Stanford shall be relieved of such obligations so assigned thereunder, provided that the assignee public agency shall expressly assume such obligations so assigned to it.

Nothing in this Agreement shall require or contemplate any delivery of water to Stanford in violation of the Act.

9.06. City of San Jose and City of Santa Clara

A. **Continued Supply on Temporary, Interruptible Basis.** During the term of the 1984 Agreement, San Francisco provided water to the City of San Jose ("San Jose") and the City of Santa Clara ("Santa Clara") on a temporary, interruptible basis pursuant to SFPUC Resolution No. 85-0256. Subject to termination or reduction of supply as provided in Section 4.05 of this Agreement, San Francisco will continue to supply water to San Jose and Santa Clara on a temporary, interruptible basis pending a decision by the Commission, pursuant to Section 4.05.H, as to whether to make San Jose and Santa Clara permanent customers of the Regional Water System. San Francisco will furnish water to San Jose and Santa Clara at the same rates as those applicable to other Wholesale Customers pursuant to this Agreement. Water delivered to San Jose and Santa Clara after July 1, 2009 may be limited by the SFPUC's ability to meet the full needs of all its other Retail and Wholesale Customers. The service areas of San Jose and Santa Clara set forth in their Individual Water Sales Contracts may not be

expanded using the procedure set forth in Section 3.03. The combined annual average water usage of San Jose and Santa Clara shall not exceed 9 MGD. The allocation of that total amount between San Jose and Santa Clara shall be as set forth in their Individual Water Sales Contracts.

B. **Reservation of Rights**. In signing this Agreement, neither San Jose nor Santa Clara waives any of its rights to contend, in the event that San Francisco (1) elects to terminate or interrupt water deliveries to either or both of the two cities prior to 2028 using the process set forth in Section 4.05, or (2) does not elect to take either city on as a permanent customer in 2028, that it is entitled to permanent customer status, pursuant to the Act or any other federal or state law. Santa Clara's reservation of rights is limited to its existing Service Area A, as shown on Attachment Q-2. Service Area B, south of Highway 101, was added in 2018 solely for the operational convenience of Santa Clara. Santa Clara waives its right to make claims described in this Section 9.06.B and Section 8.07.B.3 with respect to Service Area B. In signing this Agreement, San Francisco does not waive its right to deny any or all such contentions.

9.07. City of Brisbane, Guadalupe Valley Municipal Improvement District, Town of Hillsborough

A. The parties acknowledge that San Francisco has heretofore provided certain quantities of water to the City of Brisbane ("Brisbane"), Guadalupe Valley Municipal Improvement District ("Guadalupe") and the Town of Hillsborough ("Hillsborough") at specified rates or without charge pursuant to obligations arising out of agreements between the predecessors of San Francisco and these parties, which agreements are referred to in judicial orders, resolutions of the SFPUC and/or the 1960 contracts between San Francisco and Brisbane, Guadalupe and Hillsborough. The parties intend to continue those arrangements and accordingly agree as follows:

1. Nothing in this Agreement is intended to alter, amend or modify the terms of SFPUC Resolution No. 74-0653 or the indenture of July 18, 1908 between the Guadalupe Development Company and the Spring Valley Water Company.

2. Nothing in this Agreement is intended to alter, amend or modify the Findings of Fact and Conclusions of Law and Judgment dated May 25, 1961 in that certain action entitled City and County of San Francisco v. Town of Hillsborough in the Superior Court of the State of California in and for the County of Marin, No. 23282, as modified by the Satisfaction of Judgment filed October 23, 1961 and the Compromise and Release between

Hillsborough and San Francisco dated August 22, 1961. The rights and obligations of Hillsborough under these documents shall continue as therein set forth.

3. Nothing in this Agreement is intended to affect or prejudice any claims, rights or remedies of Guadalupe or of Crocker Estate Company, a corporation, or of Crocker Land Company, a corporation, or of San Francisco, or of their successors and assigns, respectively, with respect to or arising out of that certain deed dated May 22, 1884, from Charles Crocker to Spring Valley Water Works, a corporation, recorded on May 24, 1884, in Book 37 of Deeds at page 356, Records of San Mateo County, California, as amended by that certain Deed of Exchange of Easements in Real Property and Agreement for Trade in Connection Therewith, dated July 29, 1954, recorded on August 4, 1954, in Book 2628, at page 298, Official Records of said San Mateo County, or with respect to or arising out of that certain action involving the validity or enforceability of certain provisions of said deed entitled City and County of San Francisco v. Crocker Estate Company, in the Superior Court of the State of California in and for the County of Marin, No. 23281.

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AGREEMENT

FOR GROUNDWATER STORAGE AND RECOVERY FROM

THE SOUTHERN PORTION OF THE WESTSIDE BASIN

BY AND AMONG

THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION,

THE CITY OF DALY CITY,

THE CITY OF SAN BRUNO

AND

CALIFORNIA WATER SERVICE COMPANY

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**AGREEMENT
FOR GROUNDWATER STORAGE AND RECOVERY FROM THE
SOUTHERN PORTION OF THE WESTSIDE BASIN**

This Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Basin ("Agreement") is entered into by and among the San Francisco Public Utilities Commission ("SFPUC"), a department of the City and County of San Francisco ("San Francisco"), a California charter city, the City of Daly City ("Daly City"), a municipal corporation of the State of California, the City of San Bruno ("San Bruno"), a municipal corporation of the State of California, and California Water Service Company ("Cal Water"), a California investor-owned utility providing water service to the City of South San Francisco. Daly City, San Bruno and Cal Water are collectively referred to as "Participating Pumpers." The SFPUC and the Participating Pumpers are collectively referred to as "Parties" and individually as a "Party".

RECITALS

- A. The SFPUC provides water ("SFPUC System Water") to San Francisco retail customers and 26 Bay Area wholesale customers, including the Participating Pumpers, through the operation of an integrated local Bay Area surface water supply system and a Tuolumne River surface water supply system. Deliveries to suburban wholesale customers are pursuant to the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo and Santa Clara Counties dated July 1, 2009 ("WSA"). The SFPUC's wholesale customers extend from Daly City south through the Peninsula to Santa Clara County, and up the southeast side of San Francisco Bay through Alameda County to Hayward. Some wholesale customers, such as the Participating Pumpers, have also developed other water supplies, including local surface water and groundwater, and some import surface water from the State Water Project.
- B. The SFPUC has adopted a Water System Improvement Program (WSIP) to increase the reliability of the SFPUC water system through 2030 and to provide water to meet retail and wholesale water demands through the year 2018. The WSIP included the groundwater storage and recovery project ("Project") that is the subject of this Agreement, proposed by the SFPUC to benefit all customers purchasing SFPUC System Water. The environmental effects of WSIP implementation were analyzed in a Program environmental impact report (PEIR) certified by the San Francisco Planning Commission in Motion No. 17734 dated October 30, 2008, and approved by the SFPUC in Res. No. 08-200 dated October 30, 2008.
- C. On August 7, 2014, the San Francisco Planning Commission certified the completion of the Final Environmental Impact Report for the Project in its Motion No. M-19209, and the SFPUC approved the Project on August 12, 2014 in resolution no. 14-0127, including the adoption of a mitigation, monitoring and reporting program. SFPUC resolution no. 14-0127 authorized the SFPUC

General Manager to negotiate and execute this Agreement following approval by the Participating Pumpers.

- D. The Participating Pumpers supply water to retail customers within their respective service areas in San Mateo County through a combination of purchased water from the SFPUC ("Wholesale Water"); their own groundwater wells in the Basin; and recycled water. The Participating Pumpers purchase Wholesale Water pursuant to the terms of the WSA and Individual Water Supply Contracts. The southern portion of the Westside Groundwater Basin, shown on the map attached hereto as **Attachment A**, (hereinafter "Basin") has been a source of municipal and irrigation water supply for northern San Mateo County water users, including the Participating Pumpers. Groundwater from the Basin has also been a portion of the historical water supply for irrigation at golf courses in San Mateo County and around Lake Merced in San Francisco, and at cemeteries in Colma and San Bruno.
- E. Groundwater pumping from the Basin over the past half-century has from time to time lowered water levels within the Basin, resulting in vacant storage capacity in the Basin. The purpose of the Project described in this Agreement is to enhance the use of the Basin as an underground reservoir to store water during periods when surface water supply can be made available to offset pumping by the Participating Pumpers, leading to an accumulation of stored groundwater in the Basin. The SFPUC would augment recharge in the Basin by delivering surface water to the Participating Pumpers to be used in lieu of groundwater pumping, thus allowing groundwater to accumulate in the Basin. Stored water would be recaptured by pumping during periods of insufficient surface water supplies, thereby increasing the overall supply of potable water from the Basin.
- F. A Conjunctive Use Pilot Program conducted by the Parties demonstrated that water can be stored in the Basin through the SFPUC's delivery of In Lieu Water to replace groundwater that the Participating Pumpers refrain from pumping. The Project objective is to develop enough additional groundwater pumping capacity in order to produce up to an additional 8,100 acre feet per year (pumped at an annual average rate of 7.2 million gallons per day, or "mgd") for an anticipated total extraction of 61,000 acre feet of stored water under the Project to meet SFPUC System demands during a possible 8.5 year drought cycle.
- G. In addition to being available during shortages caused by drought, Project Facilities would be available for use during shortages caused by natural disasters, SFPUC System rehabilitation, scheduled maintenance, or malfunction of the SFPUC System as provided for in the WSA, as well as for certain non-Project purposes by Participating Pumpers, as described in this Agreement.
- H. The SFPUC, through its consulting engineering firm MWH, has completed the "*South Westside Basin Conjunctive Use Program Alternatives Analysis Report*" dated October 2007 ("AAR"), and the "*South Westside Basin Conjunctive Use Program Conceptual Engineering Report* dated November 2008 ("CER"). The

AAR evaluated well sites and distribution connection alternatives for Project Well sites, taking into account the availability of disinfection and treatment facilities, water quality blending options, and costs. The CER recommended 16 Project Well sites, and included preliminary site layouts and a schedule for subsequent phases of project design and potential implementation (i.e., pre-design site investigations, environmental review, design, and construction). The configuration of Project Facilities and Project Wells reflects the technical and engineering analyses contained in the CER and DEIR, and is as shown on the map attached hereto as **Attachment C**.

- I. The CER updated the AAR well siting plan based upon well interference analyses conducted by the firm of Luhdorff & Scalmanini in a report entitled "*Conceptual Estimate of Static Water Level Response to Planned Conjunctive Use Operations South Westside Basin*" dated April 18, 2008. Based on this work, the Participating Pumpers and the SFPUC have improved their understanding of the possible effects associated with the operation of Project Wells.
- J. A Groundwater Management Plan ("Management Plan") has been developed for the South Westside Basin with participation by San Bruno, Daly City, and Cal Water, and in collaboration with the SFPUC, under California Water Code section 10750 et. seq. The Management Plan has been adopted by San Bruno and Daly City, accepted by Cal Water, and has been received by the SFPUC.
- K. It is the intent of the Parties that this Agreement be interpreted to apply only to the Groundwater Storage and Recovery Project contemplated herein and that this Agreement will have no effect whatsoever on the land use planning or land use permitting authority or decision-making of Daly City, San Bruno, South San Francisco or the City and County of San Francisco.
- L. It is the intent of the Parties that this Agreement, unless expressly stated otherwise, shall not create, alter or impact the rights of the Parties to pump or utilize water from the Basin or the rights of the Participating Pumpers or Nonparticipating Pumpers as overlying owners, pumpers, appropriators, prescriptors or otherwise.

NOW, THEREFORE, in consideration of the foregoing Recitals, the Parties hereby agree as follows:

ARTICLE 1

DEFINITIONS

As used in this Agreement, each of the following capitalized terms shall have the respective meaning given to it in this section unless expressly stated to the contrary where such term is used.

- 1.1. **"Aggregate Designated Quantity"** is the groundwater production allocation set forth in **Section 4.5** that the Participating Pumpers can pump from their Existing Facilities and any New Wells during the Term of this Agreement.
- 1.2. **"Agreement"** shall refer to this Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Basin.
- 1.3. **"Basin"** shall refer solely to the 31 square mile southern portion of the Westside Groundwater Basin, as delineated on the map attached hereto as **Attachment A**.
- 1.4. **"Basin Management Objectives"** refers to the groundwater quality and quantity objectives set forth in the Management Plan.
- 1.5. **"Conjunctive Use Pilot Program"** is the program reflected in the First and Second Amendments to Individual Water Supply Contract between the City and County of San Francisco and the City of Daly City for Purposes of Conducting an Aquifer Recharge Study, along with any subsequent letter agreements between the SFPUC and the Participating Pumpers prior to the Effective Date of this Agreement, that authorized the continued delivery of In Lieu Water for study purposes. San Bruno and Cal Water also participated in the Conjunctive Use Pilot Program under respective amendments to their Individual Water Supply Contracts dated December 11, 2002 and December 20, 2002.
- 1.6. **"Consumer Price Index"** refers to the United States Department of Labor's Bureau of Labor Statistics Consumer Price Index for All Urban Consumers, San Francisco-Oakland-San Jose, California, excluding the shelter component of said index. If the aforesaid Consumer Price Index ceases to be published, any similar index published by any other branch or department of the U.S. government shall be used as the index in this Agreement, and if none is published, another index generally recognized as authoritative shall be substituted therefore by the Parties.
- 1.7. **"Designated Quantity"** refers to each Participating Pumper's initial production allocation of the Aggregate Designated Quantity identified in **Section 4.5**, subject to adjustment by agreement of the Participating Pumpers as provided in **Section 4.5**.
- 1.8. **"Emergency"** means a sudden, non-drought event, such as an earthquake or other catastrophic event that results in an insufficient supply of water available to all or part of a Party's service area, or to the combined SFPUC System

wholesale and retail service area, for basic human consumption, firefighting, sanitation, and fire protection.

- 1.9. **"Existing Facilities"** means those wells and associated infrastructure owned by the Participating Pumpers and in existence as of the Effective Date of this Agreement shown on **Attachment B**, and any replacements of Existing Facilities irrespective of location that may be required to pump the share of the Aggregate Designated Quantity allocated to each Participating Pumper during the Term of this Agreement.
- 1.10. **"Force Majeure Event"** means an event, conditions or circumstances not the fault of, and beyond the reasonable control of, the Party claiming excuse which makes it impossible or impracticable for such Party to operate Project Facilities, Shared Facilities or Existing Facilities for Project purposes, by virtue of its effect on (1) Project Facilities, Shared Facilities or Existing Facilities and their continued operation; (2) employees essential to such performance; or (3) the financial viability of a Party's continued operation of Project Facilities, Shared Facilities or Existing Facilities for Project purposes. Force Majeure Events include (a) an "act of God" such as an earthquake, flood, earth movement, or similar catastrophic event, (b) an act of the public enemy, terrorism, sabotage, civil disturbance or similar event, (c) a strike, work stoppage, picketing or similar concerted labor action, (d) delays in construction caused by unanticipated negligence or breach of contract by a third party or inability to obtain essential materials after diligent and timely efforts; or (e) adopted legislation or a decision, order or regulation issued by a federal or state court or regulatory agency during the Term of this Agreement.
- 1.11. **"Hold Periods"** refers to all time periods during the Term of this Agreement that are not declared to be Storage Periods by the SFPUC under **Section 4.2** or deemed to be Recovery Periods under the circumstances described in **Section 5.1**.
- 1.12. **"In Lieu Water"** is SFPUC System Water, subject to the limitations set forth in WSA section 9.02 for water delivered to Cal Water, that the SFPUC delivers at no charge on an interruptible basis to the Participating Pumpers, up to a maximum rate of delivery of 5.52 mgd, to replace groundwater that the Participating Pumpers refrain from pumping using their Existing Facilities during Storage Periods. In Lieu Water is referred to in the Conjunctive Use Pilot Program agreements as "Supplemental Water".
- 1.13. **"Individual Water Supply Guarantee"** is the amount of the 184 mgd Supply Assurance guaranteed to an individual wholesale customer under §3.02 of the WSA, as shown for the Participating Pumpers on **Attachments D-1 through D-3**.
- 1.14. **"Management Plan"** refers to the South Westside Basin Groundwater Management Plan prepared by WRIME, Inc. on behalf of San Bruno, Daly City,

Cal Water, and adopted by San Bruno and Daly City, accepted by Cal Water and received by the SFPUC.

- 1.15. **"Minimum Groundwater Requirements"** means either (1) the minimum quantity of groundwater pumping that cannot be replaced by delivery of In Lieu Water due to constraints in a Participating Pumper's distribution system that a Participating Pumper must continue to pump from its Existing Facilities combined with pumping from any New Wells during Storage Periods; or (2) the minimum quantity of groundwater pumping needed for Existing Facility or New Well maintenance in accordance with prudent operating parameters, as set forth on **Attachments D-1 through D-3**.
- 1.16. **"Minimum Surface Water Requirements"** means the minimum quantity of SFPUC System Water that must continue to be supplied to each Participating Pumper during Recovery Periods for purposes of (1) blending with groundwater as may be required to meet drinking water standards promulgated by the California State Water Resources Control Board; or (2) meeting demands in an individual Participating Pumper's service area whose distribution system may not be configured to permit delivery of groundwater to all of its customers, as set forth in **Attachments D-1 through D-3**.
- 1.17. **"New Well"** means a new groundwater production well in the Basin proposed by a Party that is not intended to replace an existing well, subject to any necessary environmental review under CEQA as set forth in **Section 7.5**.
- 1.18. **"Nonparticipating Pumps"** are groundwater users pumping water from the Basin that are not participating in this Agreement.
- 1.19. **"Operating Committee"** is the committee of SFPUC and Participating Pumper representatives formed pursuant to **Article 10** of this Agreement.
- 1.20. **"Over Production"** refers to the combined average pumping rate of the Participating Pumps using their Existing Facilities, including pumping from any proposed New Wells, that exceeds the Aggregate Designated Quantity over the course of a five year period, as explained in **Section 4.5**.
- 1.21. **"Participating Pumps"** are the groundwater pumps in the Basin that are participating in this Agreement: Daly City, San Bruno and Cal Water.
- 1.22. **"Preexisting Conditions"** refers to conditions in Existing Facilities that, if not properly managed by a Participating Pumper, have the potential to reduce the extraction of Designated Quantities from its Existing Facilities, irrespective of the intermittent operation of Project Wells.
- 1.23. **"Project"** refers to the proposed Groundwater Storage and Recovery Project described in this Agreement.

- 1.24. **"Project Capital Costs"** means costs incurred for the construction and acquisition of Project Facilities along with all Project-related planning costs, such as engineering costs, engineering services, costs to obtain Project-related regulatory permits, fees for environmental consultants, legal fees, and other costs that are required to construct and acquire Project Facilities.
- 1.25. **"Project Facilities"** includes all Project assets, such as Project Wells and all related fixed assets (e.g., real property, water treatment, connecting pipelines) that are acquired or constructed by the SFPUC pursuant to this Agreement and operated as Regional Water Enterprise assets for the allocation of capital costs and operation and maintenance expenses under the WSA, as shown on the map attached as **Attachment C** and listed on **Attachment E**.
- 1.26. **"Project Operation and Maintenance Expenses"** means the cost of operating and maintaining Project Facilities and Shared Facilities in good working order or repairing those Facilities when necessary, including all Project-related expenses, such as labor, materials and supplies, water treatment, permitting, energy, water quality monitoring and other expenses directly attributable to operation of Project Facilities for Project purposes. Project Operation and Maintenance Expenses may also include expenses incurred by the Participating Pumpers in operating Existing Facilities and new wells provided that such expenses are recommended in advance by the Operating Committee under **Section 9.2**.
- 1.27. **"Project Wells"** are the wells proposed to be installed for Project purposes, as shown on the map attached as **Attachment C**.
- 1.28. **"Recovery Notice"** is the written notice issued by the SFPUC declaring a forecasted shortage of water in the SFPUC Water System due to drought, scheduled maintenance, or an Emergency, triggering Recovery of water stored in the SFPUC Storage Account by the Parties to this Agreement at such time as the SFPUC may direct.
- 1.29. **"Recovery" or "Recovery Periods"** refers to the act of pumping or to periods of pumping of water from the SFPUC Storage Account for Project purposes using Project Facilities as may be directed by the SFPUC or recommended by the Operating Committee under **Section 5.1**. Recovery does not include the pumping of Project Wells for non-Project purposes as described in **Section 8.8**, the pumping of Project Wells for non-Project Emergency purposes under **Section 8.9**, or any volume of Over Production by a Participating Pumper.
- 1.30. **"Replacement Water"** means the quantity of SFPUC System Water made available by the SFPUC, in accordance with **Section 4.7**, to some or all of the Participating Pumpers based on a determination by the Operating Committee that the Aggregate Designated Quantity in **Section 4.5** should be reduced based on the criterion set forth in **Section 4.7**.

- 1.31. **"SFPUC System"** is the surface water importation system operated by the SFPUC that diverts, delivers, and accounts for SFPUC System Water to wholesale and retail customers in the SFPUC service area.
- 1.32. **"SFPUC System Water"** is the water the SFPUC diverts from local Bay Area watersheds and the Tuolumne River for use within the SFPUC service area, and includes any positive balance in the SFPUC Storage Account that is available for pumping using Project Wells connected to SFPUC System transmission mains or to the Participating Pumpers' water distribution systems.
- 1.33. **"SFPUC Storage Account"** means the book account maintained by the SFPUC showing the amount of water stored in the Basin during Storage Periods under this Agreement, and the amounts described in **Section 6.3** that were previously stored as a result of participation in the Conjunctive Use Pilot Project, less the amount of water pumped by the Participating Pumpers and the SFPUC from Project Wells during Recovery Periods and less losses from the Basin, as determined by the Operating Committee as provided in **Section 6.5**.
- 1.34. **"Shared Facilities"** refers to an Existing Facility that is owned by a Participating Pumper, as upgraded through the expenditure of Regional capital costs under section 5.04 of the WSA and operated in part as a Project Facility.
- 1.35. **"Shortage"** means a reduction in SFPUC System Water available to the SFPUC System or portions thereof caused by drought, Emergencies, scheduled maintenance activities, or malfunction of the SFPUC System.
- 1.36. **"Shortage Allocation"** refers to each Participating Pumper's allocation of SFPUC System Water during periods of mandatory rationing as determined by the wholesale customers in Tier 2 of the Shortage Allocation Plan or any successor plan that may be agreed to by the SFPUC and its wholesale customers during the Term of this Agreement.
- 1.37. **"Shortage Allocation Plan"** is the Water Shortage Allocation Plan attached as Attachment H to the WSA that describes a method for allocating water between the SFPUC retail and wholesale customer classes during system-wide water shortages that require an average system-wide reduction in water use of up to twenty percent.
- 1.38. **"Storage" or "Storage Periods"** refers to the act of storing water, or to periods of time when such storage occurs, through the provision of In Lieu Water to the Participating Pumpers, as may be directed by the SFPUC in accordance with **Section 4.3**.
- 1.39. **"Supply Assurance"** is the total amount (184 mgd) that the SFPUC guarantees it will make available to its wholesale customers on an annual average basis under §3.01 of the WSA.

- 1.40. **"Supply Year"** refers to the period from July 1 to June 30.
- 1.41. **"Undesirable Effects"** means a substantial adverse physical change to the Basin caused by Project operation that would result in (1) seawater intrusion, land subsidence, or water quality degradation; (2) material reductions in well yield at, or the inability to pump from, without experiencing excessive pump lifts, one or more wells owned and operated by a Participating Pumper; (3) lowering of groundwater levels such that there would be a substantial (greater than 5%) reduction in the amount of water available in the SFPUC Storage Account; (4) a substantial lowering of groundwater levels such that the impacts identified in subparts (1), (2) or (3) above would result, or any other material adverse physical change on the water supply or operations of a participating pumper. For purposes of this Agreement, "Undesirable Effects" also includes material increases in the cost of operation of Existing or Project Facilities.
- 1.42. **"Wholesale Water"** is SFPUC System Water that the SFPUC delivers to a Participating Pumper pursuant to the WSA within a Participating Pumper's Individual Water Supply Guarantee, and does not include supplies of In Lieu Water delivered to the Participating Pumps on an interruptible basis.
- 1.43. **"WSA"** refers to the Water Supply Agreement between the City and County of San Francisco and Wholesale Customers in Alameda, San Mateo and Santa Clara Counties dated July 1, 2009.

ARTICLE 2

EFFECTIVE DATE, TERM AND AMENDMENT

2.1. Effective Date

This Agreement shall be effective as of December 16, 2014, the date that the General Manager of the SFPUC signed this Agreement following approval by the Participating Pumps (the "Effective Date").

2.2. Term

The term ("Term") of this Agreement shall be co extant with the term of the WSA, subject to the limitations and terms and conditions set forth herein. The Term shall begin on the Effective Date, and shall end on the expiration of the WSA, June 30, 2034. If the term of the WSA is extended as provided in section 2.02 thereof through the addition of any Extension Term(s), the term of this Agreement shall be automatically extended for an identical Extension Term.

2.3. Amendment

The Parties may agree to amend this Agreement in writing from time to time following duly authorized approval of their governing bodies. The matters to be determined by the Operating Committee under **Section 10.2**, and amendments to **Attachments A through G**, do not require the approval of the Parties' governing bodies.

2.4. Conditions Precedent in Article 3; Termination

In the event of the failure or non-waiver of any of the conditions precedent in **Article 3**, the Parties shall meet and confer on the feasibility of satisfying or waiving the conditions. If, after reasonable efforts by the Parties, the conditions precedent in **Article 3** cannot be satisfied or waived, this Agreement shall terminate automatically.

2.5. Consequences of Non-Extension or Termination

If the term of the WSA is not extended pursuant to **Section 2.2**, or if this Agreement terminates pursuant to **Sections 11.1 or 12.14**, the SFPUC shall continue to own and have access to all Project Facilities, and shall have the right to direct the Participating Pumpers to extract and use any remaining water reflected as a credit balance in the SFPUC Storage Account as provided in **Article 5** of this Agreement, until there is no remaining water in the SFPUC Storage Account. Alternatively, the SFPUC may in its sole discretion pump any remaining stored water reflected as a credit balance in the SFPUC Storage Account, subject only to the limitations contained in this Agreement until there is no remaining water in the SFPUC Storage Account. The SFPUC shall allocate the water supply benefit that accrues as a result of such pumping in accordance with Section 3.17 of the WSA. Upon the expiration of this Agreement, the SFPUC shall otherwise have no right, claim or interest in the Basin, or to water in the Basin, pursuant to this Agreement.

ARTICLE 3

CONDITIONS PRECEDENT TO IMPLEMENTATION OF PROJECT

The construction of Project Facilities, the Parties' obligations to operate Project Facilities, Existing Facilities and Shared Facilities in accordance with this Agreement, and the taking of any discretionary actions by any Party in accordance with this Agreement, are subject to the following conditions precedent:

3.1. Permits and Approvals

Compliance with CEQA (California Public Resources Code Section 21000 et seq.) and any other authorizations, consents, licenses, permits and approvals from any governmental authority or person required by applicable law to construct and operate the Project shall have been obtained.

In considering any proposed future discretionary actions that may be proposed in this Agreement, the Parties retain absolute discretion to: (1) make such modifications to any of the proposed discretionary actions as may be necessary to mitigate significant environmental impacts; (2) select feasible alternatives to the proposed discretionary actions that avoid significant adverse impacts; (3) require the implementation of specific measures to mitigate the significant adverse environmental impacts as part of the decision to approve the discretionary actions; (4) balance the benefits of the proposed discretionary actions against any significant environmental impacts before taking final actions to approve the proposed discretionary actions if such significant impacts cannot otherwise be avoided; or (5) determine not to proceed with the proposed discretionary actions.

3.2. No Force Majeure Event

No Force Majeure Event (as defined in **Section 1.10**) shall have occurred and be continuing.

ARTICLE 4

GROUNDWATER STORAGE PERIODS

4.1. SFPUC Storage Through In Lieu Water Deliveries

During Storage Periods the SFPUC may require the Participating Pumpers to store In Lieu Water in the Basin up to a maximum rate of 5.52 mgd. All quantities of In Lieu Water stored in the Basin shall be added to the SFPUC Storage Account, up to a total maximum storage of 61,000 acre feet. All quantities of In Lieu Water delivered to Cal Water shall be in accordance with the terms of the Raker Act and the requirements of WSA section 9.02.

4.2. Notice of In Lieu Deliveries; Duty to Take Delivery of In Lieu Water

The amount of In Lieu Water available for delivery to the Participating Pumpers shall be at the sole discretion of the SFPUC, taking into account hydrologic, operational and other conditions of concern to the SFPUC as the operator of the SFPUC System. If the SFPUC elects to declare a Storage Period and deliver In Lieu Water, the Participating Pumpers shall accept In Lieu Water delivered by the SFPUC in accordance with the terms and conditions of this Agreement.

In accordance with the schedule set forth in the Shortage Allocation Plan, the SFPUC informs its wholesale customers, including the Participating Pumpers, of its final estimate of available SFPUC System Water by April 15th (or sooner if adequate snow survey measurement data is available) to form a robust estimate of the water supply available to the retail and wholesale customer classes for the coming Supply Year. As a part of that annual determination, the SFPUC will give written notice to the Participating Pumpers and the Operating Committee on or before April 15th of the availability, anticipated quantities, and timing of SFPUC In Lieu Water deliveries.

4.3. Reduction in Pumping from Existing Facilities; Minimum Groundwater Requirements

If the SFPUC's notice of available SFPUC System Water states that In Lieu Water is available for delivery to the Participating Pumpers at the maximum total rate of 5.52 mgd, the Participating Pumpers shall each respond to the SFPUC in writing by May 15th regarding whether and to what extent they can accept delivery of In Lieu Water over the course of the coming Supply Year by reducing pumping of their Designated Quantities from their Existing Facilities to the amounts of their respective Minimum Groundwater Requirements shown in **Attachments D-1, D-2 and D-3**.

The Participating Pumpers' may indicate in their responses that they elect to pump groundwater from their Existing Facilities at rates higher than their individual Minimum Groundwater Requirements, up to a cumulative total exceedance of 1.9 mgd, as may be allocated based on mutual agreement of the Participating Pumpers. The Participating Pumpers shall take delivery of a minimum of 5 mgd of In Lieu Water during Storage Periods, or of any smaller quantity of In Lieu Water that is made available by the SFPUC in the notice issued on or before April 15th.

The Participating Pumpers shall decrease pumping from their Existing Facilities on such date as the Parties may agree but no later than July 1, at which time the SFPUC will commence delivery of In Lieu Water up to the amount made available by the SFPUC, and as requested by the Participating Pumpers. All quantities of In Lieu Water delivered by the SFPUC up to a rate of 5.52 mgd will be accounted for as credits in the SFPUC Storage Account.

The Participating Pumpers may operate their Existing Facilities to pump less than their individual Minimum Groundwater Requirements during Storage Periods. Deliveries of SFPUC System Water to offset pumping reductions below a Participating Pumper's Minimum Groundwater Requirement shall not be considered In Lieu Water and are subject to the provisions of **Section 6.4**. Increases in Minimum Groundwater Requirements may be made only with the approval of the Operating Committee under **Section 10.2.5**.

4.4. Location of Delivery of In Lieu Water to Participating Pumpers

The SFPUC shall deliver In Lieu Water to the Participating Pumpers at the existing service connections detailed in each Participating Pumper's Individual Water Supply contract with the SFPUC. To the extent that delivery of In Lieu Water under the Project requires additional service connections to the SFPUC System, such connections shall be considered Project Facilities for cost allocation purposes under **Article 9** of this Agreement.

4.5. Aggregate Designated Quantity; Initial Designated Quantities Assigned to Participating Pumpers

The Participating Pumpers agree to restrict the pumping of groundwater from the Basin utilizing their Existing Facilities, combined with any pumping from proposed New Wells, to the Aggregate Designated Quantity of 7,724 acre feet per year, extracted at an annual cumulative rate of 6.9 mgd. Subject to the limitation on Over Production expressed in **Section 4.8**, the Participating Pumpers may in their sole discretion exceed the 6.9 mgd annual cumulative pumping rate provided that the five-year moving average cumulative pumping rate, computed solely with reference to the previous five years of Recovery and Hold periods, shall not exceed 6.9 mgd. The initial Designated Quantities assigned to each of the Participating Pumpers over the first Supply Year during the Term of this Agreement are as follows:

4.5.1. Daly City: 3,842 acre feet per year, extracted at an annual average rate of 3.43 mgd.

4.5.2. Cal Water: 1,534 acre feet per year, extracted at an annual average rate of 1.37 mgd.

4.5.3. San Bruno: 2,350 acre feet per year, extracted at an annual average rate of 2.1 mgd.

The Designated Quantities set forth in this section may be freely altered, transferred, adjusted or allocated by agreement (collectively, "adjustments") of the Participating Pumpers in each Supply Year during the Term of this Agreement, provided that (1) the Aggregate Designated Quantity is not increased above 6.9 mgd using the five-year moving average described in this section; (2) the adjustments in Designated Quantities are reflected, to the extent possible, in the annual operating plans developed by the Operating Committee under **Section 8.6**; and (3) such adjustments do not exceed 10%, of each Participating Pumper's agreed upon Designated Quantity, plus or minus, for that Supply Year. The Operating Committee may consider an increase to the 10% limitation on adjustments to Designated Quantities expressed in this section in accordance with the criteria set forth in **Sections 4.6.1** and **4.6.2**.

4.6. Increase of Aggregate Designated Quantity

The future operation of the Basin for Project purposes, and continued water level monitoring by the Parties in accordance with the Management Plan, may result in mutual agreement that the Aggregate Designated Quantity set forth in **Section 4.5** may be below the yield of the Basin. Requests by the Participating Pumpers to extract groundwater above the Aggregate Designated Quantity may be approved by the Operating Committee as set forth in **Section 10.2.12**. As of the Effective Date of this Agreement, the Participating Pumpers are not planning to extract groundwater above the Aggregate Designated Quantity, but are incorporating a process for adjusting the Aggregate Designated Quantity should the Operating Committee decide to exercise its discretion to do so in the future, following compliance with CEQA to the extent required. Potential increases in the Aggregate Designated Quantity may be considered by the Operating Committee under any of the following circumstances:

4.6.1. Based on actual water level data and operational experience, or changed conditions, following the completion and acceptance of Project Facilities as reflected in a resolution of the SFPUC.

4.6.2. At any time following the permanent replacement of groundwater pumped by a Nonparticipating Pumper with water from another source, e.g. recycled water.

4.7. Reduction in Aggregate Designated Quantity; Provision of Replacement Water by the SFPUC

The Operating Committee may determine under **Section 10.2.12** that it is necessary to reduce the Aggregate Designated Quantity set forth in **Section 4.5**. Any decision of the Operating Committee to reduce the Aggregate Designated Quantity shall be based solely on a determination that continued pumping of the Aggregate Designated Quantity will result in the long term decline of Basin water levels absent Project operations in a manner that substantially interferes with the ability to extract water from the SFPUC Storage Account during Recovery Periods.

The determination of each Participating Pumper's share of any reduction in the Aggregate Designated Quantity shall be by agreement of the Participating Pumpers. In the event the Participating Pumpers are unable to reach agreement, Section 12.1 shall apply. Following such agreement, the SFPUC agrees that it will provide a total of up to 500 acre feet of Replacement Water per year to the Participating Pumpers at a cost of \$226.53 per acre foot within 60 days of receipt of written notification by the affected Participating Pumper(s). The price of Replacement Water may be adjusted annually by the SFPUC based on the Consumer Price Index.

The supply of Replacement Water by the SFPUC shall not increase a Participating Pumper's Individual Water Supply Guarantee under the WSA and shall be consistent with section 9.02 of the WSA. In the event that the SFPUC offers to increase the Supply Assurance under section 4.06 of the WSA, and one or more Participating Pumpers receiving Replacement Water requests and receives an increase in its Individual Water Supply Guarantee, then the SFPUC's obligation to provide Replacement Water shall cease to the extent of the increase in the Participating Pumper's Individual Water Supply Guarantee that is offered by the SFPUC, and the corresponding amount of Replacement Water formerly supplied by the SFPUC shall be priced at the then-current SFPUC wholesale water rate. Alternatively, the SFPUC's obligation to provide a Replacement Water supply to one or more Participating Pumpers may be retired in whole or part if the SFPUC pays a mutually agreed upon one-time capital cost contribution towards a permanent replacement of groundwater pumped by a Nonparticipating Pumper with water from

another source in the Basin as provided in **Section 4.6.2**. Prior to making any decision to retire a Replacement Water obligation by making a capital cost contribution towards a permanent replacement of groundwater pumped from the Basin, the SFPUC agrees that it will solicit input and recommendations from the Bay Area Water Supply and Conservation Agency and the wholesale customers under WSA section 3.15.B. The provision of Replacement Water described in this section shall not be construed as precedent for the allocation of surface water by the SFPUC in any future water transfer or SFPUC System capital project involving other wholesale water customers of the SFPUC.

The notice(s) from the affected Participating Pumper(s) requesting delivery of Replacement Water shall, on an annual basis, select one of the following options:

4.7.1. An annual transfer of storage credits in the SFPUC Storage Account.

4.7.2. Provision of interruptible supplies of surface water from the SFPUC System, provided that the SFPUC determines, in its sole discretion, that such supplies are available.

4.8. Over Production of Water in Excess of Aggregate Designated Quantity

At the close of each Supply Year, beginning in the fifth year of Project operations, the Operating Committee will determine whether the Participating Pumpers engaged in Over Production, and if so, identify which Participating Pumper(s) were responsible for the Over Production by pumping more than its agreed upon Designated Quantity during the previous five year averaging period. Over Production shall never exceed an amount that is 10% over the Aggregate Designated Quantity (7.6 mgd) in any Supply Year or the five-year moving average amount of 6.9 mgd calculated as provided in **Section 4.5** above. No volume of Over Production shall result in any deduction of water from the SFPUC Storage Account. Any Participating Pumper determined by the Operating Committee to be responsible for Over Production shall take one of the following corrective actions:

4.8.1. reduce pumping below its Designated Quantity, not including Storage Periods, by a commensurate amount to restore water to the Basin in the amount of the Over Production which will result in the five year moving average basis of 6.9 mgd being achieved;

4.8.2. replace the quantity of water pumped in excess of the Designated Quantity with water from another source or supply, resulting in an equivalent amount of water being stored in the Basin, subject to the approval of the Operating Committee under **Section 10.2.12**; or

4.8.3. other appropriate measures proposed by the Parties, subject to the approval of the Operating Committee under **Section 10.2.12**.

A Participating Pumper that engages in Over Production shall propose its preferred method for remedying the Over Production by August 1st of the succeeding Supply Year and shall so inform the other members of the Operating Committee. If the proposed remedy for Over Production requires a decision of the Operating Committee under **Section 10.2.12**, the Operating Committee shall convene within 30 days of receipt of the proposal. The corrective measures set forth in **Sections 4.8.1 through 4.8.3** shall not be applicable to Over Production required solely due to an Emergency or for Project Management purposes as directed by the Operating Committee under **Section 5.2.3**.

ARTICLE 5

RECOVERY OF SFPUC STORAGE ACCOUNT WATER FROM PROJECT WELLS

5.1. Circumstances Triggering Recovery of SFPUC Storage Account Water by Participating Pumpers

Pursuant to **Section 5.2**, the SFPUC will determine the quantity of groundwater to be pumped from the SFPUC Storage Account using Project Wells in any of the following circumstances:

5.1.1. During Shortages caused by drought using the process set forth in the Shortage Allocation Plan, and as set forth in Section 5.2.1; or

5.1.2. During Shortages caused by an Emergency, SFPUC System rehabilitation, scheduled maintenance, or malfunction of the SFPUC System, any of which permit the SFPUC to temporarily reduce deliveries of Wholesale Water to all or some of its wholesale customers as set forth in WSA §3.11; or

5.1.3. Upon recommendation of the Operating Committee, including for purposes of managing the SFPUC Storage Account.

5.2. Timing of Recovery of Water from SFPUC Storage Account

5.2.1. Drought Recovery

The SFPUC may issue a Recovery Notice during droughts when the SFPUC determines that available water supplies from the SFPUC System are insufficient to meet customer purchase projections using the process set forth in the Shortage Allocation Plan. During Shortages caused by drought, the SFPUC may choose to exercise its dry year water supply options, including but not limited to Recovery of water from the SFPUC Storage Account; requesting voluntary reductions in water use or imposition of mandatory rationing; or any combination of these measures. Upon issuance of a Recovery Notice by the SFPUC, the Parties and the Operating Committee shall make plans and preparations for the possible Recovery of SFPUC Storage Account water commencing on July 1 or such later date as the Recovery Notice shall direct, pursuant to **Section 5.3** below. In successive dry years, the SFPUC's initial determination of water availability under the Shortage Allocation Plan shall include the remaining volume of water in the SFPUC Storage Account, and the SFPUC may direct the Participating Pumpers to continue Recovery from Project Wells under their operational control in each successive dry year until the total volume in the SFPUC Storage Account is exhausted.

5.2.2. Non-Drought Shortages

During Shortages that would be caused by SFPUC System rehabilitation or scheduled maintenance, the SFPUC's Recovery Notice shall provide not less than 60 days' advance notice to the Participating Pumpers and the Operating Committee that water must be pumped from the SFPUC Storage Account using Project Wells. During Emergencies or malfunctioning of the SFPUC System that

prevent the SFPUC from meeting water demands in its combined retail and wholesale service areas at established level of service goals for the delivery of SFPUC System Water, the SFPUC may issue a written Recovery Notice that requires Recovery by the Participating Pumpers as soon as is reasonably practicable.

5.2.3. Management of SFPUC Storage Account

For purposes of managing the SFPUC Storage Account, the Operating Committee may authorize pumping outside of Recovery Periods and shall develop a schedule of pumping pursuant to **Section 10.2.2** that provides adequate notice to the Parties of the need to pump water from the SFPUC Storage Account.

5.3. Issuance of Recovery Notice by the SFPUC

Based on the circumstances and timing set forth in **Sections 5.2.1 and 5.2.2**, the SFPUC may, in order to manage the limited supply of SFPUC System Water during Shortage, issue a Recovery Notice directing that groundwater be pumped by Participating Pumpers from Project Wells in the Basin, up to the cumulative total amount available in the SFPUC Storage Account and in accordance with the Operating Committee's (1) operating schedule developed pursuant to **Section 10.2.2** and (2) rules for accounting for storage losses from the Basin pursuant to **Sections 6.5 and 10.2.10**.

5.4. Quantities of Water Available to Participating Pumpers from Project Facilities and SFPUC System Connections During Shortages Caused by Drought

During Shortages caused by drought that require mandatory rationing, the quantity of groundwater pumped by each Participating Pumper from the SFPUC Storage Account using Project Facilities, plus each Participating Pumper's Minimum Surface Water Requirement, shall not exceed the volume of the Wholesale Water allocation that would have been available to that Participating Pumper under the methodology adopted by all of the wholesale customers under section 2.2 of the Shortage Allocation Plan. During Shortages caused by drought that require mandatory rationing, the Participating Pumpers may not take delivery of SFPUC Surface Water in excess of the volumes that would have been available to them under section 2.2 of the Shortage Allocation Plan as a substitute for reduced pumping from their Existing Facilities or from Project Wells under their operational control.

5.5. Minimum SFPUC System Water Deliveries to Participating Pumpers during Recovery Periods

During Recovery Periods, the SFPUC shall continue to supply each Participating Pumper with its Minimum Surface Water Requirements, as set forth in **Attachment D**. Changes in Minimum Surface Water Requirements may be made only with the approval of the SFPUC, which shall not be unreasonably withheld.

5.6. Recovery of Stored Water by the SFPUC

Project Facilities include Project Wells located on SFPUC System transmission line rights of way which may, in addition to Project Wells operated by the Participating Pumpers, be operated by the SFPUC for the Recovery of SFPUC Storage Account water pursuant to **Section 5.1**. These Project Wells are shown on **Attachment C**.

5.7. Limitations on Recovery

The Parties agree that Recovery will never exceed the cumulative amount of water available in the SFPUC Storage Account (taking into consideration Basin losses measured in accordance with the methodology adopted by the Operating Committee in accordance with **Section 6.5**), and that Recovery will never exceed 8,100 acre-feet per Supply Year withdrawn at an average rate of 7.2 mgd. The SFPUC further agrees that it will not pump or recover any water from the Basin unless there is a positive balance in the SFPUC Storage Account. If the SFPUC pumps or recovers any water from the Basin in excess of the balance available in the SFPUC Storage Account, the SFPUC must transfer a corresponding amount of SFPUC System Water to the Basin over the course of the succeeding Supply Year at no cost to the Participating Pumpers.

ARTICLE 6

PROJECT WATER ACCOUNTING

6.1. Accounting for Storage and Recovery

Accounting for Storage and Recovery of groundwater in the SFPUC Storage Account is to be performed on the following basis:

6.1.1. **Storage Period Accounting.** All quantities of In Lieu Water delivered to the Participating Pumpers will result in a corresponding credit to the SFPUC Storage Account. The SFPUC's calculation of Storage Account credits will be based on the volume of In Lieu Water delivered to each Participating Pumper through its service connections to the SFPUC System. The total volume of In Lieu Water delivered during Storage Periods will be measured based on the delta between the combined metered reductions in each Participating Pumper's annual Designated Quantity and its respective Minimum Groundwater Requirement. The Participating Pumpers will provide metered volumes of groundwater produced from their Existing Facilities to the SFPUC on a monthly basis. Quantities of In Lieu Water delivered to each Participating Pumper by the SFPUC will be reflected in the next SFPUC monthly billing to each Participating Pumper for Wholesale Water, along with the cumulative total of prior In Lieu Water deliveries during Storage Periods.

6.1.2. **Recovery Period Accounting.** All quantities of groundwater pumped from Project Wells by the Parties for Project purposes will result in a corresponding debit to the SFPUC Storage Account. Pumping for Project purposes includes pumping of up to 265 acre feet per year from Project Wells for purposes of maintaining well capacity when idle during Storage Periods and Hold Periods. The SFPUC's calculation of Storage Account debits will be based upon Project Well meter readings made by or provided to the SFPUC. During Recovery Periods, the SFPUC's monthly billings to each Participating Pumper for Wholesale Water will include the total metered extractions of SFPUC Storage Account Water from Project Wells by the Parties, along with the balance remaining in the SFPUC Storage Account.

6.1.3. Water Accounting for Use of Project Facilities for Non-Project Purposes or During Emergencies. The Participating Pumpers' use of Project Facilities for non-Project purposes under **Section 8.8** shall not result in a corresponding debit to the volume of water stored in the SFPUC Storage Account. A Participating Pumper's use of Project Facilities during a local Emergency under **Section 8.9** shall not result in a corresponding debit to the volume of water stored in the SFPUC Storage Account, unless the SFPUC determines, in its sole discretion, that such pumping is required under **Section 5.2.2** in order to maintain water deliveries from the SFPUC System to its combined wholesale and retail service area at the SFPUC's established level of service goals.

6.2. Accounting for Wholesale Water

Wholesale Water deliveries shall continue to be paid for by the Participating Pumpers pursuant to the WSA and shall not increase the credit balance in the SFPUC Storage Account. The SFPUC's delivery of Replacement Water, and interruptible supplies of In Lieu Water to a Participating Pumper in excess of its Individual Water Supply Guarantee, shall not be construed to create any liability, dedication to public use, or obligation on the part of the SFPUC to provide a greater volume of water to that Participating Pumper than its Individual Water Supply Guarantee, as set forth in Attachment C to the WSA.

Apart from changes in the timing of SFPUC System Water delivery and payment therefore in accordance with conjunctive operation of the Basin, and as is set forth in **Section 12.18** of this Agreement, nothing in this Agreement is intended to affect the Participating Pumpers' rights to, and payment for, Wholesale Water, including each Participating Pumper's share of payment for SFPUC System Regional asset capital costs and associated operating expense categories under the WSA.

6.3. Accounting for In Lieu Water Delivered during Conjunctive Use Pilot Program

During the Conjunctive Use Pilot Program, the SFPUC delivered In Lieu Water to the Participating Pumpers. The following quantities of water have been added to the SFPUC Storage Account as a result of the Conjunctive Use Pilot Program:

6.3.1. **Daly City** - During the Conjunctive Use Pilot Program, up until April 1, 2006, the SFPUC delivered 9,573 acre feet of In Lieu Water to Daly City, which paid for that water at the \$0.35 per unit rate established under the Conjunctive Use Pilot Program. That water, which is included as a credit balance to the SFPUC Storage Account, shall be pumped first at no charge to Daly City upon the future initiation of Recovery.

From April 1, 2006 through March 31, 2011, the SFPUC continued to periodically deliver In Lieu Water to Daly City at no charge, resulting in an additional credit of 7,864 acre feet in the SFPUC Storage Account. Those deliveries shall be credited to the SFPUC Storage Account, and, when Recovery is initiated, and after Daly City has received, at no charge, 9,573 acre feet stored under the Conjunctive Use Pilot Program, Daly City shall pay for groundwater

pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

6.3.2. Cal Water - During the first phase of the Conjunctive Use Pilot Program, between February 1, 2003 and November 30, 2003, the SFPUC delivered 802 acre feet of In Lieu Water to Cal Water, which paid for that water at the \$0.35 per unit rate established under the Conjunctive Use Pilot Program.

When the Conjunctive Use Pilot Program restarted on April 1, 2004, Cal Water did not participate and did not resume pumping any part of its Designated Quantity, but continued to rely on Wholesale Water for all of its water needs in its South San Francisco service area. This resulted in an increase in Basin water levels as if Cal Water had continued to participate in the Conjunctive Use Pilot Program, and a corresponding increase in the SFPUC Storage Account of 938 acre feet between April 1, 2004 and March 1, 2005. The SFPUC will reduce Cal Water's FY 2014-15 Wholesale Water billings by \$315,323 (three hundred fifteen thousand three hundred twenty three dollars), representing the difference between the rate charged for 938 acre feet of water delivered under the Conjunctive Use Pilot Program and the established FY 2003-04 and FY 2004-05 SFPUC Wholesale Water rates paid by Cal Water, as if Cal Water had continued to participate in the Conjunctive Use Pilot Program between April 1, 2004 and March 1, 2005. The SFPUC will make the credit adjustment to Cal Water's FY 2014-15 Wholesale Water account by no later than June 30, 2015. Following the SFPUC's adjustment of Cal Water's Wholesale Water payment balance to reflect the previous storage of 938 acre feet in the SFPUC Storage Account, the total quantity of water delivered to Cal Water between February 1, 2003 - November 30, 2003 and April 1, 2004 - March 1, 2005 (1,740 acre feet) shall be pumped first at no charge to Cal Water upon the future initiation of Recovery. The SFPUC shall reimburse Cal Water an amount not to exceed \$80,000 (eighty thousand dollars), based on invoices submitted and approved by the SFPUC, for design costs previously incurred by Cal Water as Project Capital Costs to evaluate the feasibility of co-locating Shared Facilities for Project Well no. 13 at Cal Water's existing South San Francisco water treatment facilities. Should Cal Water ultimately approve construction of these Shared Facilities, the SFPUC will contribute an additional amount not to exceed \$500,000 (five hundred thousand dollars) towards the total costs of Cal Water's Shared Facilities as a Project Capital Cost, and shall reimburse Cal Water for design and construction costs as a lump sum payment prior to construction, for a total potential not to exceed amount of \$580,000 (five hundred eighty thousand dollars). Operation and maintenance expenses incurred by Cal Water as a result of operating Shared Facilities for Project purposes as a Project Facility shall be reimbursed by the SFPUC as Project Operations and Maintenance Expenses in accordance with **Section 9.2**.

When Recovery is initiated, and after Cal Water has received, at no charge, 1,740 acre feet stored between February 1, 2003 and March 1, 2005, Cal Water shall

pay for groundwater pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

6.3.3. San Bruno - During the Conjunctive Use Pilot Program, up until March 1, 2005, the SFPUC delivered 3,915 acre feet of In Lieu Water to San Bruno, which paid for that water at the \$0.35 per unit rate established under the Conjunctive Use Pilot Program. That water, which is included as a credit balance to the SFPUC Storage Account, shall be pumped first at no charge to San Bruno upon the future initiation of Recovery.

When Recovery is initiated, after San Bruno has received, at no charge, 3,915 acre feet stored under the Conjunctive Use Pilot Program, San Bruno shall pay for groundwater pumped from the SFPUC Storage Account as provided in **Section 6.4** of this Agreement.

San Bruno and SFPUC agree to execute a memorandum of understanding that reflects the SFPUC's intent to provide for, or to construct at the SFPUC's expense, facilities for the emergency storage of one million gallons of water in pressure zone 1/4, or equivalent, during Storage Periods since San Bruno's Existing Facilities would not be immediately available to supply water during an emergency.

6.4. Deferred Payment for Stored In Lieu Water Supplies

Except as expressly provided in **Section 6.3** of this Agreement, a Participating Pumper will not pay for In Lieu Water at the time of delivery. Rather, payment will be deferred until Recovery by pumping. The SFPUC will bill, and the Participating Pumper will pay, for groundwater pumped by the Participating Pumper from the SFPUC Storage Account using Project Facilities at the then-applicable Wholesale Water rate established by the SFPUC. During Storage Periods, each Participating Pumper shall pay the established SFPUC Wholesale Water rate for all quantities of Wholesale Water that are delivered to it as a result of pumping from Existing Facilities at a rate less than its Minimum Groundwater Requirement.

6.5. Accounting for Losses

Groundwater modeling performed by the Parties as well as the Management Plan have determined that the Basin is not a closed basin. Therefore, the Operating Committee shall develop and adopt, and periodically revise, if necessary, a proposal for accounting for losses from the Basin under **Section 10.2.10**, including, if necessary, a reduction in the Aggregate Designated Quantity under **Section 4.7** or to the volume of water in the SFPUC Storage Account, which shall be consistent with generally accepted principles of groundwater accounting and management.

ARTICLE 7

OWNERSHIP, OPERATION, MAINTENANCE AND REPLACEMENT OF EXISTING FACILITIES

7.1. Ownership, Operation, Maintenance and Replacement of Existing Facilities

Each Participating Pumper will continue to own, operate, maintain and replace, if necessary, its Existing Facilities during the Term of this Agreement. This Agreement does not authorize nor prohibit the replacement of Existing Facilities, which shall be based solely on the discretion of each Participating Pumper following environmental review under CEQA, if necessary. Each Participating Pumper further agrees that it is solely responsible for all costs associated with the operation, maintenance, repair and replacement of its Existing Facilities, except to the extent authorized in Section 9.2.

7.2. Operation and Maintenance of Existing Facilities

Each Participating Pumper agrees, to the extent practicable and economically feasible, to operate, maintain, repair and replace its Existing Facilities (1) in accordance with this Agreement and applicable laws, rules, regulations, guidelines, well encrustation studies and prudent utility operator standards, including management of any Preexisting Conditions to avoid interference with Recovery of water from the SFPUC Storage Account; (2) in accordance with its agreed upon share of the Aggregate Designated Quantity set forth in Section 4.5; and (3) in a manner that will not cause Undesirable Effects on Project Wells or the wells of other Participating Pumps. The Participating Pumps agree to use best efforts to maintain their Existing Facilities in good repair so as to be fully capable of producing the Aggregate Designated Quantity set forth in Section 4.5 during Recovery Periods.

7.2.1. During the period following the SFPUC's issuance of a Recovery Notice for a potential drought pursuant to Section 5.2.1, each Participating Pumper shall conduct such testing and perform all maintenance or rehabilitation work on its Existing Facilities that may be required to produce its agreed upon Designated Quantity by the date specified in the Recovery Notice and over successive years if the drought continues. Within 30 days of receipt of the initial Recovery Notice under Section 5.2.1, and during each successive drought year, each Participating Pumper shall submit a written report to the Operating Committee signed by its licensed system operator that describes (1) the condition of its Existing Facilities; (2) whether its Existing Facilities are capable of producing its Designated Quantity by the date specified in the Recovery Notice; and (3) what steps must be undertaken by the Participating Pumper to improve its Existing Facilities in the event that it cannot produce its Designated Quantity by the date specified in the Recovery Notice.

7.2.2. In the event that the initial or subsequent reports reveal that a Participating Pumper's Existing Facilities are not capable of producing its share of the Aggregate Designated Quantity, the Participating Pumper shall provide additional reports on a quarterly basis to the Operating Committee until it has resolved the problem, as certified by its licensed system operator.

7.2.3. In the event of the temporary outage of Existing Facilities, the Participating Pumper owning the Existing Facility shall notify the Operating Committee of the

nature and extent of the outage. To the extent the Participating Pumper is able to obtain permission for the use of alternative facilities owned by Nonparticipating Pumpers (such as cemetery or golf course wells) for the production of its Designated Quantity, the Participating Pumper may utilize such alternative facilities after notification to and review by the Operating Committee.

7.3. Failure to Maintain, Repair, or Replace Existing Facilities

In the event that a Participating Pumper cannot provide certification by its licensed system operator that it has undertaken and completed the work identified in the initial report to the Operating Committee under **Section 7.2** by the date specified in the SFPUC's Recovery Notice under **Section 5.2.1**, the SFPUC shall have no obligation to increase the quantity of Wholesale Water available to the Participating Pumper under the Shortage Allocation Plan to make up any shortfall in the production of that Participating Pumper's Designated Quantity caused by the unavailability of its Existing Facilities.

7.4. Measurement of Water Pumped Using Existing Facilities

All Parties shall install, maintain and use adequate measuring devices on all water pumped from Existing Facilities, New Wells, and Project Wells, and shall report accurate measurements of all water pumped from Existing Facilities, New Wells and Project Wells to any Party and the Operating Committee upon request. All meters shall be maintained to be accurate within plus or minus 2%.

7.5. Drilling and Operation of New Wells by Parties

The SFPUC agrees not to construct or operate New Wells in the Basin other than (1) pursuant to this Agreement; (2) the certified Project final environmental impact report, and any addenda or supplements thereto; and (3) with the approval and agreement of the Participating Pumpers following amendment of this Agreement as provided in **Section 2.3**. Prior to drilling a test hole that may result in construction of a New Well, each Party proposing to construct and operate a New Well shall (i) provide written notice to the Operating Committee and the other Parties of its intent to do so; (ii) conduct environmental review to the extent required under CEQA of the impacts associated with construction and operation of the proposed New Well; (iii) if necessary, provide the Operating Committee with an analysis of mutual pumping interference effects between the proposed New Well and potentially affected Project Facilities and Existing Facilities operated by other Parties; and (iv) obtain a well construction permit from San Mateo County or the public entity with jurisdiction over well construction permits for the proposed New Well, if necessary. The Parties shall be given written notice and opportunity to comment on any environmental documentation prepared for a New Well within the time frame allowed for public comment under CEQA, and shall also be copied on any CEQA notices of exemption or notices of determination filed by a Party in connection with carrying out the approval of a New Well. All New Wells proposed by the Parties shall be located, constructed and operated in a manner that will not cause Undesirable Effects. Once operational, New Wells installed by the Participating Pumpers shall be considered to be Existing Facilities.

ARTICLE 8

OWNERSHIP, INSTALLATION, OPERATION, AND MAINTENANCE OF PROJECT FACILITIES

8.1. Project Facilities

Project Facilities, shown on the map attached as **Attachment C** and listed on **Attachment E**, are required to make use of 61,000 acre feet per year of the available storage capacity in the Basin by facilitating the simultaneous extraction of the Aggregate Designated Quantity by the Participating Pumpers from their Existing Facilities and stored SFPUC System Water by the Parties from Project Wells during Recovery Periods.

8.2. Real Property Interests Required for Project Implementation

Project Facilities may be located on lands within the service areas of the Participating Pumpers and/or on lands owned or acquired by the SFPUC. The SFPUC will acquire all real property interests that are necessary for the installation of, and access to, Project Facilities. The SFPUC agrees to grant suitable licenses to each Participating Pumper to the extent required for access to Project Facilities connected to a Participating Pumper's water distribution system. Each Participating Pumper agrees to grant the SFPUC suitable licenses for all Project Facilities on or across land owned by that Participating Pumper. All licenses exchanged by the Parties will follow the format used in **Attachment G**, subject to modification as necessary to address site specific needs and conditions. Each Participating Pumper further agrees to use reasonable best efforts to assist the SFPUC in securing fee title or easements for Project Facilities that may be located on property owned by other governmental entities within the service areas of the Participating Pumpers.

8.3. Ownership of Project Facilities

All Project Facilities will be owned by the SFPUC, subject to the limitations and restrictions within this Agreement.

8.4. Installation of Project Facilities

The SFPUC shall be solely responsible for the permitting, licensing, design, construction, and installation of Project Facilities under this Agreement. Each Participating Pumper shall have the right to approve the location of Project Facilities on land owned by such Participating Pumper, along with the design and the construction schedule for installation of any Project Facilities in its service area, which approvals shall not be unreasonably delayed or withheld. At the 10, 35, 65, 95 and 100% stages of design, the SFPUC will provide each Participating Pumper with the plans and specifications of work to be performed on the Participating Pumper's property or within its service area. Pending completion of design, the proposed location of Project Facilities is generally shown on the map attached as **Attachment C** and described in **Attachment E**. As set forth in **Section 12.3** of this Agreement, the SFPUC will require in all construction contracts for Project Facilities that the Participating Pumpers, and their respective officers, agents and employees, be named (1) as additional insureds on all required insurance policies, and (2) as additional indemnitees in any contractual indemnity provisions. Project Facilities constructed on land owned or acquired by the SFPUC shall be immune from San Bruno and Daly City planning,

zoning and building permit requirements pursuant to the doctrine of intergovernmental immunity set forth in the case law interpreting California Government Code §§53090 et seq.

8.5. Provision of As-Built Drawings; Modifications to Project Facilities Following Completion

Within three (3) months of completion and acceptance of Project Facilities (as reflected in a Resolution adopted by the SFPUC), the SFPUC shall deliver to each Participating Pumper a complete set of as-built drawings and specifications for all Project Facilities located within its service area. Should improvements and/or modifications be made to Project Facilities, the SFPUC will provide each Participating Pumper with revised as-built drawings and specifications within three (3) months of completing the improvements and/or modifications to Project Facilities.

8.6. Operation and Maintenance of Project Facilities; Potential Undesirable Effects Associated with Operation of Project Facilities as Designed

The Operating Committee will develop annual operation, maintenance and monitoring plans under the Project pursuant to Section 10.2.1. The Operating Committee will also develop annual operating schedules for each Supply Year during Recovery Periods, including projected groundwater storage and/or Recovery from Project Wells of any water available in the SFPUC Storage Account and pursuant to Section 10.2.2. Each Participating Pumper agrees to operate, maintain, and repair Project Facilities (except those Project Facilities connected to the SFPUC System transmission mains) that are connected to its distribution system as necessary to comply with the terms of this Agreement and to further the aims of the Project in accordance with applicable laws, rules, regulations, guidelines, and prudent utility operator and asset management standards, and in accordance with the annual operation, maintenance and monitoring plans approved by the Operating Committee under Sections 10.2.1 and 10.2.2. The SFPUC will operate, maintain and repair all Project Facilities connected to SFPUC System transmission mains. When the Project Facilities reach the end of their useful service lives, the SFPUC shall reasonably determine whether to replace or abandon all or any portion of Project Facilities.

8.6.1. The estimated pumping level drawdown effects upon Existing Facilities resulting from the future operation of Project Wells over a hypothetical seven and one-half year drought are set forth in **Attachments D-1, D-2 and D-3**. The Participating Pumpers agree that the estimated pumping water levels shown in **Attachments D-1, D-2 and D-3** are acceptable and will not cause any Undesirable Effects to their Existing Facilities.

8.6.2. Should actual operating experience of Project Wells cause greater pumping level drawdown effects than estimated in **Attachments D-1, D-2 or D-3**, that are determined by the Operating Committee to be Undesirable Effects, the Operating Committee shall have the authority to require the measures outlined in **Section 10.2.8** in order to eliminate or reduce the Undesirable Effect(s) to a less than significant level.

8.7. Modifications to Participating Pumpers' Water Supply Permits Issued by the California State Water Resources Control Board

Installation and operation of Project Facilities may require amendments to the Parties' drinking water supply permits issued by the Division of Drinking Water and Environmental Management

(DDWEM). The Parties will be solely responsible for obtaining any DDWEM permit modifications and for permit compliance related to the operation of Project Facilities connected to their water transmission and distribution systems. The SFPUC will assist in preparing exhibits required for the Participating Pumpers' permit amendment packages submitted to DDWEM. All costs incurred by the Parties in obtaining such permit modifications shall be considered Project Capital Costs. Each Party that operates Project Wells, and the downstream facilities that receive water from those Project Wells, shall be named as the Operator of Record in the modified water supply permits issued by DDWEM.

8.8. Use of Project Facilities by Participating Pumpers for Non-Project Purposes

The Participating Pumpers may use Project Facilities for non-Project purposes upon satisfaction of all of the following conditions precedent:

(a) the SFPUC has not issued a Recovery Notice directing the Participating Pumpers to pump water from the SFPUC Storage Account under **Section 5.3** of this Agreement;

(b) use of Project Facilities for non-Project purposes does not interfere with future Recovery under the Project, as determined by the Operating Committee;

(c) the quantity of water pumped using Project Facilities for non-Project purposes does not, when combined with pumping from Existing Facilities, exceed the Participating Pumper's Designated Quantity; and

(d) the Operating Committee has approved the proposed use of Project Facilities for non-Project purposes.

The Operating Committee will consider all requests for use of Project Facilities for non-Project purposes within 30 days. As of the Effective Date of this Agreement, the Parties do not contemplate any specific use of Project Facilities for non-Project purposes, but the Parties desire to incorporate a process for allowing such use should they decide to exercise their discretion to do so in the future following compliance with CEQA to the extent required. Except as approved by the Operating Committee, use of Project Facilities for non-Project purposes pursuant to this section shall not exceed thirty (30) days' duration. The approved use of Project Facilities for non-Project purposes is not subject to the limitation on Recovery set forth in **Section 5.7**, and groundwater pumped pursuant to this section will not be debited against the SFPUC Storage Account as provided in **Section 6.1.3**.

8.9. Use of Project Facilities During an Emergency

The Parties may use Project Facilities within their service areas without the advance approval of the Operating Committee for non-Project purposes during a local Emergency that does not result in the SFPUC issuing Recovery Notice under **Section 5.3**, provided that the Project Facilities are capable of operation during an Emergency. Such pumping may continue only for the duration of the Emergency. Within 48 hours of such Emergency, the Party or Parties shall notify and explain to the Operating Committee the basis of the Emergency. The Party will, at intervals established by the Operating Committee, report on its efforts to resolve the Emergency.

ARTICLE 9

PROJECT COST RECOVERY

9.1. Project Capital Costs

The SFPUC will provide all funding required for payment of Project Capital Costs. To the extent that the Participating Pumpers directly provide in-kind services, real property, equipment assets in furtherance of the construction of Project Facilities, and Shared Facilities for Project purposes, the value of these contributions shall be included within Project Capital Costs. All Project Facilities listed on **Attachment E** will be classified as Regional SFPUC System assets for purposes of cost recovery under the WSA, unless indicated otherwise. The capital costs and operation expenses of Shared Facilities that are used and useful to a Participating Pumper irrespective of Project operations shall be allocated between the SFPUC and that Participating Pumper on the basis of mutual agreement or as otherwise specified in this Agreement. On an annual basis during construction of Project Facilities and Shared Facilities, the SFPUC will include information detailing estimated and actual Project Capital Costs in accordance with the requirements of WSA sections 5.04 and 6.08.

9.2. Project Operation and Maintenance Expenses

The SFPUC shall annually reimburse each Participating Pumper for all Project Operation and Maintenance Expenses actually incurred in the operation and maintenance of Project Facilities and Shared Facilities for Project purposes. The SFPUC's reimbursement obligation does not extend to Project Operation and Maintenance Expenses incurred by the Participating Pumpers for the operation of Project Facilities for non-Project purposes permitted in **Sections 8.8 and 8.9**. By November First of each year during the Term, each Participating Pumper shall provide an estimated Project Operations and Maintenance Expenses budget to the Operating Committee for the coming Supply Year as referenced in **Section 10.2.1**. The Operating Committee, on a case-by-case basis, may also recommend that the SFPUC reimburse the Participating Pumpers for operations and maintenance expenses incurred in the operation of Existing Facilities that are attributable to Undesirable Effects caused by Project operations. A Participating Pumper requesting reimbursement of expenses for the operation and maintenance of Existing Facilities shall certify that it has been operating and maintaining its Existing Facilities in a reasonable and prudent manner, including but not limited to management of the effects of Preexisting Conditions. All Project Operation and Maintenance Expenses, including expenses incurred by the SFPUC for the operation and maintenance of Project Wells connected to SFPUC System transmission mains, shall be considered Regional operation and maintenance expenses under WSA section 5.05, as further detailed in **Attachment F**. Project Operation and Maintenance Expenses incurred by a Participating Pumper in the operation of Shared Facilities shall be allocated based on the proportionate use of Shared Facilities for Project purposes. After the close of each Supply Year on June 30, each Participating Pumper shall submit an accounting, including invoices and other documentation, supporting its actual Project Operation and Maintenance Expenses over the preceding Supply Year to the SFPUC. Accounting detail submitted by a Participating Pumper for reimbursement of annual Project Operation and Maintenance Expenses shall be of sufficient detail to permit the SFPUC to properly allocate these expenses between (1) the SFPUC's retail and wholesale water customers under the WSA and (2) Project Facilities, Shared Facilities, and the Participating Pumper's Existing Facilities. The SFPUC shall reimburse each Participating Pumper for incurred Project Operation and Maintenance Expenses within sixty (60) days of receipt of the annual accounting. In the alternative, the SFPUC may, with the agreement of the Participating Pumper, reimburse the Participating Pumper for the previous fiscal year's Project Operation and Maintenance Expenses as one or more credits on monthly invoices for Wholesale Water over the course of the following

Fiscal Year. Disputes between the SFPUC and one or more Participating Pumpers concerning the reimbursement or accuracy of accounting of annual Project Operation and Maintenance Expenses will be resolved by the Operating Committee, or pursuant to **Section 12.1**.

9.3. Use of Project Facilities by Participating Pumpers for Non-Project Purposes

If the temporary use of Project Facilities by a Participating Pumper for non-Project purposes is approved by the Operating Committee under **Section 8.8** of this Agreement, or is approved by the SFPUC during a local Emergency under **Section 8.9**, the Participating Pumper shall deduct a proportionate share of operation and maintenance expenses reflecting such operation from the annual total of Project Operations and Maintenance Expenses submitted to the SFPUC for reimbursement under **Section 9.2**.

9.4. Metering of Project Facilities Operated During Recovery Periods by the SFPUC

The metered volume of water pumped from Project Wells connected to SFPUC transmission mains pursuant to **Section 5.6** shall be used to account for pumping of water for Project purposes as provided in **Section 6.1.2**. Meters that measure the flow of water pumped during Recovery Periods that is added to SFPUC transmission lines shall be considered new "System Input Meters" in accordance with Section 3.14 and Attachment J of the WSA.

ARTICLE 10

OPERATING COMMITTEE

10.1. Composition of Operating Committee

Upon the Effective Date of this Agreement, the Parties shall form a four member Operating Committee comprised of one representative each from the Participating Pumpers and the SFPUC. For decisions requiring a majority vote, the Operating Committee shall select a neutral fifth member not currently employed by or serving as a consultant to any of the Parties to serve as a tie-breaker as necessary in the event of a deadlock between the other members of the Operating Committee. The neutral fifth member may be employed by, or a consultant to, the Bay Area Water Supply and Conservation Agency. If a majority of members of the Operating Committee cannot agree to the identity of the neutral fifth member, the name shall be selected at random from the list of names proposed by members of the Operating Committee. The fifth member of the Operating Committee shall have no voting authority apart from serving as a tie-breaker. All 5 members of the Operating Committee shall have experience and technical expertise in water supply, groundwater wells and pump operations.

10.2. Duties and Powers of Operating Committee

The Management Plan contains Basin Management Objectives that are consistent with the sustainable management of the Basin. The Operating Committee will consider, but not be bound by, (1) the Basin Management Objectives and (2) the Mitigation, Monitoring and Reporting Program adopted by the SFPUC as a binding commitment in Resolution No. 14-0127 in making the decisions authorized in Article 10 of this Agreement. The duties and powers of the Operating Committee are limited to the following.

- 10.2.1. Development of annual Project operation, maintenance and monitoring plans, and estimated budgets for these activities, as set forth in **Section 8.6** and **Section 9.2**, to ensure proper management of the Project, including protocols for reporting collected data back to the Operating Committee by the Parties, review of operation, maintenance and monitoring plans submitted by the Parties, and recovery of Project Operations and Maintenance Expenses. The annual plans required by this section shall be completed by December 1 of each year.
- 10.2.2. Development of Project Well operating schedules during Recovery Periods by May 1st of each drought year that projects Recovery, including where such pumping shall occur, in what quantities, and any redirection or reduction in pumping to avoid Undesirable Effects or well interference impacts identified in the Project Mitigation, Monitoring and Reporting Program, subject to the sole discretion of the SFPUC to determine the volumes of In Lieu Water available for Storage and subsequent Recovery of any water available in the SFPUC Storage Account under **Articles 4** and **5** of this Agreement. Project Well operating schedules for non-drought Shortages under **Sections 5.2.2** and **5.2.3** shall be developed and approved by the Operating Committee on an as-needed basis.
- 10.2.3. Review of (1) annual reports submitted by the Participating Pumpers' licensed operators certifying that the Existing Facilities within their respective service areas are capable of operation during droughts in compliance with the standards set forth in **Section 7.2** of this Agreement; and (2) a Participating Pumper's proposed use of facilities owned by Nonparticipating Pumpers as required to pump Designated Quantities due to the unavailability of the Participating Pumper's Existing Facilities referenced in **Section 7.2** of this Agreement.
- 10.2.4. Review and approval of a request by a Participating Pumper to use Project Facilities for non-Project purposes, under the conditions set forth in **Section 8.8**.
- 10.2.5. Review and approval of a Participating Pumper's request for an increase in its Minimum Groundwater Requirement, pursuant to **Section 4.3**.
- 10.2.6. Monitoring pumping from all Existing and Project Facilities within the Basin to evaluate water quality trends and whether increases in the volume of water produced are occurring, including any Over Production in pumping from Existing Facilities resulting from higher Basin operating levels attributable to Storage under the Project. In response to changed conditions within the Basin, the Operating Committee may make recommendations to the Parties as to whether any action or changes in Project water accounting rules set forth in **Section 6.1** may be necessary to protect the Recovery of SFPUC Storage Account Water and Designated Quantities or to ensure the recovery of Project costs in accordance with Article 9 of this Agreement.
- 10.2.7. Approval of pumping Project Wells outside of Recovery Periods for Project management pursuant to **Section 5.2.3**.

- 10.2.8. Determining whether the operation of Project Wells caused Undesirable Effects on Existing Facilities under **Section 8.6** and identifying measures that the SFPUC must take to reduce or eliminate such Undesirable Effects and otherwise avoid harm to the Participating Pumpers and ensure long-term viability of the Basin as a drinking water supply. To the extent that the Operating Committee determines that the pumping of any Project Well caused Undesirable Effects, the Operating Committee may require one or more of the following actions, subject to necessary CEQA compliance: (1) redirect pumping to other Project Facilities; (2) reduce pumping at particular Project Well(s) while preserving the cumulative ability of the SFPUC to order the extraction of up to 8,100 acre feet annually from the SFPUC Storage Account; (3) modification of Existing Facilities as a Project Capital Cost (e.g., resetting pumps, installing water treatment facilities, vacuum pumps etc.); (4) reimbursement of additional cost as a Project Operation and Maintenance Expense under **Section 9.2**; or (5) such other remedy as may be appropriate.
- 10.2.9. Request and approval of studies and such technical support as is necessary to assist in Project management, conduct required monitoring, to refine Project goals and operations, to use the Basin more effectively, and to identify and address potential problems. Technical support may be provided by employees of the Parties or by third-party contractors. The costs of all technical support authorized by the Operating Committee shall be deemed a Project Operations and Maintenance Expense.
- 10.2.10. Determine the appropriate methodology of accounting for losses from the Basin under **Section 6.5**.
- 10.2.11. Review of information provided by the Parties required under **Section 7.5** concerning proposed New Wells.
- 10.2.12. Increases in the limitation on adjustments to Designated Quantities expressed in **Section 4.5** and the Aggregate Designated Quantity, using the criteria set forth in **Section 4.6**; reductions in the Aggregate Designated Quantity as provided in **Section 4.7**, and the approval of actions to remedy Over Production that is delegated to the Operating Committee under **Section 4.8.3**.

10.3. Operating Committee Decision-Making

The development of Project Well operating schedules under **Section 10.2.2** during Recovery Periods, and the decisions delegated to the Operating Committee in **Sections 10.2.5, 10.2.7, 10.2.10, and 10.2.12**, shall require unanimous approval of the Operating Committee. All other decisions of the Operating Committee shall be by majority vote of the members of the Operating Committee, utilizing the fifth tie-breaker vote as necessary. For all matters, each member of the Operating Committee shall: (a) act in good faith; (b) utilize the best available scientific evidence relevant to the matter including but not limited to data and analysis generated by numeric models that meet prevailing industry standards for accuracy and reliability; and (c) ensure that the Storage and Recovery of water under the Project avoids Undesirable Effects to the Basin as well as ensure the long-term viability of the Basin as a drinking water supply. A minority of Operating Committee members may request voluntary mediation of certain disputes as described in **Section 12.1** of this Agreement.

10.4. Schedule for Meetings of Operating Committee

The Operating Committee shall meet within thirty days after the Effective Date of this Agreement, and thereafter as often as necessary to implement operations and take other action under this Agreement, but shall meet at least twice a year.

10.5. Minutes of Operating Committee Meetings

Minutes of all Operating Committee Meetings shall be kept and shall reflect a summary of all proceedings, actions and recommendations taken by the Operating Committee. Copies thereof shall be furnished to all Parties.

10.6. Duty of Each Party to Monitor Conjunctive Use Project Performance

Each Party has an independent obligation to review all monitoring information reported to the Operating Committee. If any Party believes that the Storage and Recovery of water under the Project is causing Undesirable Effects to its Existing Facilities, that Party shall promptly advise the Operating Committee.

ARTICLE 11

DEFAULTS AND REMEDIES

11.1. Remedies upon Termination

Notwithstanding anything to the contrary herein, if one or more of the Participating Pumpers breaches any provision of this Agreement, or invokes the existence of a Force Majeure Event under **Section 12.14**, the SFPUC may terminate this Agreement with respect to the Party or Parties by written notice to the Participating Pumpers.

11.1.1. If the SFPUC terminates this Agreement due to the occurrence of a Force Majeure Event or breach by one or more of the Participating Pumpers, any credit balance in the SFPUC Storage Account shall remain the property of the SFPUC, along with the ownership of all Project Facilities within such Party or Party's service area(s). Upon such termination, the SFPUC may in its sole discretion extract any stored water reflected as a credit balance in the SFPUC Storage Account using the Project Wells referenced in **Section 5.6** of this Agreement until there is no remaining water in the SFPUC Storage Account. Alternatively, in its sole discretion, the SFPUC may require the breaching Party or Parties, or Party(ies) subject to a Force Majeure Event, to purchase from the SFPUC the remaining balance of any water in the SFPUC Storage Account that is attributable to Storage of In Lieu Water by that Party, based on the applicable wholesale water rate for that water as provided in **Section 6.4** of this Agreement.

11.1.2. In the event that this Agreement is terminated under this section 11.1 or **Section 12.14**, the provisions of WSA **Section 3.17**, as it may be amended by the SFPUC and its wholesale customers, shall govern (1) the disposition of the balance of water in the SFPUC Stored Water Account; (2) the allocation of outstanding eligible Project Operations and Maintenance Expenses; and (3) the disposition of investments in Project Capital Costs by the SFPUC should the Project Facilities no longer be used to benefit wholesale or retail customers of the

SFPUC System. Upon the termination of this Agreement the SFPUC shall otherwise have no right, claim or interest in the Basin, credit or storage balances in the Basin, or water in the Basin, pursuant to this Agreement.

11.2. Remedies are Cumulative

The rights and remedies of the Parties are cumulative, and the exercise by any Party of one or more of such rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same breach or any other breach by the other Party.

ARTICLE 12

MISCELLANEOUS PROVISIONS

12.1. Dispute Resolution

If (1) any dispute arises between or among the Parties regarding interpretation or implementation of this Agreement that does not concern a decision of the Operating Committee; or (2) one or more Parties file a written appeal with the Operating Committee within 14 days of an Operating Committee decision or action subject to majority vote; or (3) the members of the Operating Committee cannot achieve unanimity as described in **Section 10.3**; or (4) one or more Parties decline to follow a decision or action of the Operating Committee; or (5) one or more Parties asserts that the Operating Committee is acting beyond the scope of its authority as specified in this Agreement, the Parties will, in the first instance, attempt in good faith to resolve the dispute through their chief executive officers or their designees. If the chief executive officers cannot forge a consensus on the disputed issue, the matter shall be referred for non-binding mediation to a single mediator who will have technical expertise in groundwater management and/or public utility accounting practices. The mediator will be selected by unanimous consent of the Parties, but if unanimous consent of the Parties cannot be obtained the mediator will be selected by a majority vote of the Parties from a list of mediators maintained by the Operating Committee based on the qualifications set forth in this **Section 12.1**. Any Party may commence mediation by providing to the other Parties a written request for mediation, setting forth the subject of the dispute and the relief requested. The non-binding mediation will be governed by the American Arbitration Association's Commercial Mediation Procedures. If the dispute is not resolved by mediation, each Party will be free to pursue whatever legal or equitable remedies may be available. The fees and expenses incurred as a result of any dispute resolution activities, including attorney's fees, mediator fees and costs, expert costs, and other expenses, shall be borne solely by the Parties involved in the dispute. The Parties involved in the dispute will share the mediator's expenses on an equal basis.

12.2. Mutual Indemnity

Each Party agrees to indemnify, defend, and hold the other Parties and their respective officers, employees and agents free and harmless from and against any and all loss, liability, expense, claims, costs, suits and damages, including attorney's fees, arising out of that Party's willful misconduct or negligent acts, errors, or omissions in its operation and maintenance of Existing Facilities, Shared Facilities or Project Facilities under **Articles 7 and 8** of this Agreement.

12.3. Insurance and Indemnity Provisions Applicable to Construction of Project Facilities

The SFPUC and the Participating Pumpers agree to the following provisions concerning insurance coverage and indemnity during the construction of Project Facilities.

12.3.1. Commencing from the date of Project approval by the SFPUC, every contract issued by the SFPUC for construction of Project Facilities (including associated professional services, environmental consultants, and other contracts required for construction of Project Facilities) shall require the contractor to maintain in force during the course of the contract all customary insurance required by the SFPUC, and shall include coverage for worker's compensation, commercial general liability insurance, automobile liability insurance and professional liability insurance. Each contractor's general, automobile, and professional liability insurance policies shall name as additional insured each Participating Pumper, and its officers, agents and employees.

12.3.2. Commencing from the date of Project approval by the SFPUC, every contract issued by the SFPUC for construction of Project Facilities (including associated professional services, environmental consultants, and other contracts required for construction of the Project) shall contain language requiring the contractor to indemnify, defend and hold harmless the SFPUC and each Participating Pumper for any and all claims for bodily injury or property damage arising out of the contractor's performance of work in constructing or installing Project Facilities or providing support services required for Project implementation.

12.4. Workers' Compensation Insurance for Project Operation

Each Party will provide to the other Parties evidence of Workers' Compensation insurance prior to entering into this Agreement. With respect to employees of a particular Party who are employed as operators of Project Facilities, the other Parties shall not be considered joint employers of any such employees, who shall be solely managed and controlled by each individual Party. Each Party agrees to maintain in force, during the term of this Agreement, Workers' Compensation insurance, in statutory amounts, with Employers' Liability Limits of not less than \$1,000,000 each accident.

The cost of Workers' Compensation insurance applicable to the Parties' operation of Project Facilities shall be considered a Project Operations and Maintenance Expense. Approval of Workers' Compensation insurance by the SFPUC shall not relieve or decrease the liability of each Participating Pumper hereunder. In the event that any employee of a Party files a Workers' Compensation claim against another Party, the Party whose employee filed the claim agrees to indemnify, defend and hold harmless the other Parties for any such claims as provided in Section 12.2 of this Agreement.

12.5. Right to Adjudicate; Limited Waiver of Prescriptive Rights Claims; No Intent to Abandon

12.5.1. Each Party reserves all rights to initiate or participate in a general adjudication of Basin groundwater rights. Nothing in this Agreement shall limit in any way any rights or interests that the Parties may assert related to the use or management of the Basin in the event of a general adjudication of Basin

groundwater rights, apart from the waiver of prescriptive rights claims set forth in section 12.5.2.

12.5.2. In the event of a general adjudication of Basin groundwater rights, including adjudication of issues pertaining to Basin use or management, (i) unless directed otherwise by a court or regulatory agency, the Participating Pumpers agree that the SFPUC will retain the right to any credit balance in the Storage Account, and the right to continue Storage and Recovery of up to 61,000 acre feet of water in the Basin using Project Facilities; (ii) the SFPUC expressly waives the right to store additional water in the Basin without the express written consent of all Parties effective through written amendment of this Agreement in accordance with **Section 2.2**; and (iii) each Party to this Agreement expressly waives any and all claims to prescriptive groundwater rights against the other Parties based on the production or use of groundwater pursuant to this Agreement; provided, however, that the Participating Pumpers reserve and retain all other claims to prescriptive groundwater rights which they may possess as of the Effective Date.

12.5.3. The failure of any Participating Pumper to use all of its Designated Quantity for any amount of time during periods of In Lieu Water delivery shall not be deemed to be or constitute an abandonment of such Participating Pumper's Designated Quantity.

12.5.4. The Parties agree that each Participating Pumper may file notices of reduction of groundwater use as a result of the use of an alternative supply of water from a nontributary source, pursuant to California Water Code Section 1005.1.

12.5.5. The SFPUC recognizes that it cannot and will not assert any claim to water in the Basin, including, but not limited to, as an overlying owner, pumper, or appropriator, except as expressly authorized under this Agreement or to the extent any such right exists as a result of the SFPUC's rights to the North Westside Basin.

12.6. Nonparticipating Pumpers

A Nonparticipating Pumper may become a Party to this Agreement if agreed to by all Parties in a written modification to this Agreement, as provided for in **Section 2.3**, subject to any additional terms or conditions agreed to by the Parties.

12.7. More Favorable Terms

If, at any time during the term of this Agreement, the SFPUC enters into an agreement with another party who is not signatory to this Agreement with respect to use of the Basin for a conjunctive use Project, and such agreement contains price, quantity, or other material terms that are more favorable than the terms extended to a Participating Pumper under this Agreement, the Parties will immediately modify this Agreement to extend the more favorable terms to Participating Pumpers.

12.8. Assignment

No Party shall transfer this Agreement, in whole or in part, or any of its interests, to any other person or entity without the prior written consent of the other Parties. Any attempt to transfer or

assign this Agreement, or any privilege hereunder, without such written consent shall be void and confer no right on any person or entity not a Party to this Agreement.

12.9. Successors

This Agreement shall bind and inure to the benefit of the Parties and their respective successors and permitted assigns.

12.10. Entire Agreement

This Agreement constitutes the entire agreement between the Parties pertaining to the matters provided for herein and, except as herein provided, supersedes all prior and/or contemporaneous agreements and understandings, whether written or oral, between the Parties related to the matters provided for herein.

12.11. Severability

Should any provision of this Agreement prove to be invalid or illegal, such invalidity or illegality shall in no way affect, impair or invalidate any other provisions hereof, and such remaining provisions shall remain in full force and effect; provided, however, if the illegality or invalidity of any provision undermines the intent of the Parties, then the Parties shall attempt in good faith to amend the Agreement in order to fulfill the intent of the Parties. If the Parties are unable to so amend the Agreement, then the Agreement shall terminate and be of no further force or effect.

12.12. Counterparts

This Agreement, and any document or instrument entered into, given or made pursuant to this Agreement or authorized hereby, and any amendment or supplement thereto, may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

12.13. Notice

Formal written notices, demands, correspondence and communications between the Parties authorized by this Agreement shall be sufficiently given if personally delivered or dispatched by registered or certified mail, first-class, postage prepaid, return receipt requested, to the Parties as follows:

To the SFPUC:

Steve Ritchie
Assistant General Manager, Water Enterprise
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
email: sritchie@sfwater.org

With a copy to:
San Francisco City Attorney's Office
Attn.: Utilities General Counsel
Room 234 City Hall
1 Carlton B. Goodlett Place
San Francisco, CA 94102

To Daly City: Patrick Sweetland
Director of Water and Wastewater Resources
City of Daly City
153 Lake Merced Blvd.
Daly City, CA 94015
email: psweetland@dalycity.org

With a copy to:
Rose Zimmerman
City Attorney
City of Daly City
233 90th Street
Daly City, CA 94015
email: rzimmerman@dalycity.org

To San Bruno: Constance C. Jackson
City Manager
567 El Camino Real
San Bruno, CA 94066

With a copy to:
Marc Zafferano
City Attorney
567 El Camino Real
San Bruno, CA 94066

To Cal Water: Anthony Carrasco, District Manager
California Water Service Company
Bayshore District
341 North Delaware Avenue
San Mateo, CA 94401-1727
email: acarrasco@calwater.com

With a copy to:
Lynne McGhee, Corporate Secretary and Associate
Corporate Counsel
1720 North First Street
San Jose, CA 95112-4508

email: lmcghee@calwater.com

12.14. Force Majeure

12.14.1. Excuse from Performance. No Party shall be liable in damages to any other Party for delay in performance of, or failure to perform, its obligations under this Agreement, if such delay or failure is caused by a Force Majeure Event.

12.14.2. Notice. The Party claiming excuse shall deliver to the other Parties a written notice of intent to claim excuse from performance under this Agreement by reason of a Force Majeure Event. Notice required by this section shall be

given as promptly and as reasonably possible in light of the circumstances. Such notice shall describe the Force Majeure Event, the services impacted by the claimed event, the length of time that the Party expects to be prevented from performing, and any steps which the Party intends to take to attempt to restore its ability to perform.

12.14.3. Ability to Perform. Any suspension of performance by a Party pursuant to this section shall be only to the extent, and for a period of no longer duration than, required by the nature of the Force Majeure Event, and the Party claiming excuse shall use its best efforts to remedy its inability to perform as quickly as possible.

12.14.4. If the Party claiming a Force Majeure Event is not able to restore its ability to perform its obligations within one year after giving notice pursuant to Section 12.14.2, it may elect to terminate its participation in the Project. The Party claiming excuse will thereafter give an additional 60 days written notice of said termination to the Parties and the Operating Committee.

12.14.5. In the event that a Party terminates participation in this Agreement under section 12.14.4, the provisions of WSA Section 3.17 and section 11.1 of this Agreement shall govern the disposition of investments in Project Capital Costs, allocation of outstanding eligible Project Operations and Maintenance Expenses, and the balance of water in the SFPUC Storage Account.

12.15. Maintenance and Inspection of Books, Records and Reports

The Participating Pumpers shall maintain careful, accurate and complete records of all receipts and disbursements made for (1) reimbursable Project Operations and Maintenance Expenses authorized under **Section 9.2** and detailed in **Attachment F**; and (2) expenses related to use of Project Facilities for non-Project purposes authorized under **Section 9.3**. During regular office hours, and upon reasonable notice, the Parties shall have the right to inspect and make copies of any books, records, and reports pertaining to this Agreement or related matters in the possession of the other Parties at the inspecting Party's cost. The SFPUC and its agents may conduct audits of the Participating Pumpers during the term of this Agreement for the purpose of ensuring that Project Operations and Maintenance Expenses incurred by the Participating Pumpers are eligible for reimbursement in accordance with **Attachment F**, and to ensure that any expenses incurred by the SFPUC due to the Participating Pumpers' operation of Project Wells for non-Project purposes are repaid to the SFPUC. The Participating Pumpers agree to cooperate with the SFPUC in connection with any such audit. All costs incurred by the Participating Pumpers that are associated with responding to an audit by the SFPUC shall be considered Project Operation and Maintenance Expenses.

12.16. Governing Law; Venue

The laws of the State of California shall govern the interpretation and enforcement of this Agreement. The Parties agree that Santa Clara County is an appropriate neutral county in the event one Party seeks to change venue under Code of Civil Procedure section 394.

12.17. Effect of Agreement on WSA

The provisions of this Agreement do not affect, change or modify any section, term or condition of the WSA. In the event of any conflict between this Agreement and the terms of the WSA, the terms of the WSA shall control.

12.18. Compliance with Raker Act

Nothing in this Agreement shall be construed to authorize or result in delivery of SFPUC System Water to the California Water Service Company in violation of section 6 of the Raker Act (38 Stat. 242).

12.19. Cooperation in Implementation of Project Mitigation Measures

The Participating Pumpers acknowledge the mitigation measures set forth in the Project final environmental impact report and Mitigation, Monitoring and Reporting Program adopted by the SFPUC as part of Project approval, and agree to cooperate with the SFPUC in complying with such measures to the extent that they are under the control of, or are the responsibility of, one or more of the Participating Pumpers. Any costs or expenses associated with such compliance and cooperation shall be the responsibility of the SFPUC, and the SFPUC must reimburse the Participating Pumpers for such costs and expenses as a component of Project Capital Costs.

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**SAN FRANCISCO PUBLIC UTILITIES
COMMISSION**

By:



Harlan L. Kelly, Jr.
General Manager

Authorized by SFPUC Res. No. 14-0127 Dated August 12, 2014

Approved as to form:

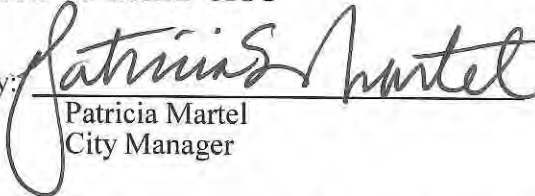
DENNIS J. HERRERA
City Attorney



By: Joshua D. Milstein
Deputy City Attorney

CITY OF DALY CITY

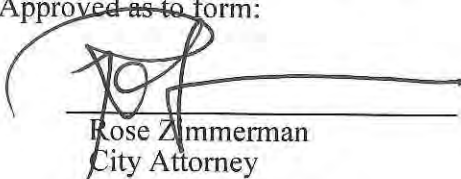
By:



Patricia Martel
City Manager

Authorized by City Council Res. No. 14-153 Dated: September 8, 2014

Approved as to form:



Rose Zimmerman
City Attorney

CITY OF SAN BRUNO

By:



Constance Jackson
City Manager

Authorized by City Council Res. No. 2014-103 Dated: September 23, 2014

Approved as to form:



Marc Zaffarano
City Attorney

CALIFORNIA WATER SERVICE COMPANY

By:



Martin Kropelnicki, President and Chief Executive Officer

Dated: 12-16-14

Approved as to form:




Lynne McGhee, Vice President and General Counsel

Appendix B

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



TO: SFPUC Wholesale Customers 
FROM: Steven R. Ritchie, Assistant General Manager, Water
DATE: June 2, 2021
RE: Regional Water System Supply Reliability and UWMP 2020

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

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

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

Pursuing a Tuolumne River Voluntary Agreement

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

Unfortunately, it has been a challenge to work with the State on this, but we continue to persist, and of course we are still interested in early implementation of the TRVA.

Evaluating our Drought Planning Scenario in light of climate change

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

London N. Breed
Mayor

Sophie Maxwell
President

Anson Moran
Vice President

Tim Paulson
Commissioner

Ed Harrington
Commissioner

Newsha Ajami
Commissioner

Michael Carlin
Acting
General Manager



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

Pursuing Alternative Water Supplies

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

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

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

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

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

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

cc.: SFPUC Commissioners

Nicole Sandkulla, CEO/General Manager, BAWSCA