Appendix I – Water Supply Assessment

ALBERT A. WEBB ASSOCIATES

WATER SUPPLY ASSESSMENT

BEAUMONT SUMMIT STATION SPECIFIC PLAN PROJECT

SECOND DRAFT

Prepared for:

BEAUMONT CHERRY VALLEY WATER DISTRICT EST. 1919

November 17, 2021

www.webbassociates.com

TABLE OF CONTENTS

APPENDICES

(Enclosed on CD)

A. Beaumont Cherry Valley Water District. *2020 Urban Water Management Plan.* Adopted August 26, 2021.

B. San Gorgonio Pass Water Agency. *2020 Urban Water Management Plan*, prepared by Tully & Young. Adopted June 21, 2021.

C. San Gorgonio Pass Water Agency Law, Chapter 101 (1961).

D. San Gorgonio Pass Water Agency Contract with the Department of Water Resources (1962) and subsequent amendments thereto.

E. San Gorgonio Pass Water Agency Resolution No. 2015-05 (July 27, 2015).

F. Statements of Water Diversion and Use (No. S014351 and No. S014352).

G. Project Description for Beaumont MDP Line 16 Recharge Basin Feeder.

H. Draft Memorandum of Understanding between BCVWD and City of Beaumont (2019).

I. Beaumont Cherry Valley Water District Resolution No. 2014-05 (October 8, 2014).

J. Beaumont Basin Stipulation, Judgment and exhibits (2004).

FIGURES

TABLES

CHARTS

SPREADSHEETS

SECTION 1 - INTRODUCTION

Senate Bill 610 (SB 610) was signed into California state law with an effective date of January 1, 2002. SB 610 amended existing legal requirements for confirmation of water supply sufficiency as a condition of approval for development projects. The confirmation of water supply sufficiency is achieved through an assessment of the water supplier's existing and future water sources, and existing and projected water demand in relation to a "project" as defined by California Water Code (CWC or Water Code) section 10912, resulting in the production of a project-specific Water Supply Assessment ("WSA" or "Assessment"). Additional analysis is required in the WSA if any portion of the water supply includes groundwater. The WSA is prepared and adopted by the water supplier and included in the California Environmental Quality Act (CEQA) analysis for the project. The CEQA Lead Agency must then independently determine, based on the entire record, whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses (CWC section 10911).

Law

CWC 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.*

CWC section 10912:

For the purpose 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.

1.1 Purpose

The purpose of the WSA is to answer the following key question pursuant to SB 610: whether the projected supply for the next 20 years, based on normal, single dry and multiple dry years, will meet the demand projected for the project plus existing and planned future uses, including agricultural and manufacturing uses.

The Exeter Property Group commissioned Albert A. Webb Associates (WEBB) to prepare this WSA for the Project on behalf of Beaumont-Cherry Valley Water District (BCVWD). The City of Beaumont did not make a formal request to BCVWD for the WSA. On July 7, 2021, BCVWD indicated to WEBB that it had no objection to WEBB preparing the WSA on the behalf of BCVWD for their review and approval.

1.2 Background

The Project area is comprised of the former Sunny-Cal Egg and Poultry Ranch, which operated from 1964 to 2005 (**Figure 1-1 – Vicinity Map** located at the end of this section). Upon closure of the poultry ranch, the owners desired to transition the property to residential uses under a proposed specific plan: Sunny-Cal Specific Plan. The Sunny-Cal Specific Plan and accompanying EIR were approved/certified in 2007 by the Beaumont City Council; however, the development was never implemented. The 2007

Sunny-Cal Specific Plan planned for up to 560 low-density residential units with open space and park areas. In 2017, the majority of the Sunny-Cal property was annexed into the City and BCVWD service area. The annexed portions constitute the entire Project area. (Kimley-Horn, pp. 1-5, 1-6)

The EIR was challenged in 2007 and was upheld by the California Court of Appeals in 2010. The Court upheld the certified EIR and found that Sunny-Cal was entitled to the water supply entitlements identified in the EIR (based upon the 2004 stipulated judgment for the Beaumont Basin) (*Cherry Valley Pass Acres & Neighbors v. City of Beaumont*, Nov. 22, 2010).

As explained further in Chapter 3 – Water Supply Analysis and Chapter 4 – Groundwater Analysis, the Sunny-Cal Specific Plan properties were assigned overlying water rights to the Beaumont Groundwater Basin pursuant to the 2004 adjudication of the Beaumont Basin (Judgment). The adjudication created the Beaumont Basin Watermaster (BBW) to manage and enforce the provisions of the Judgment. The original Safe Yield[1] of the Beaumont Basin in the 2004 Judgment was 8,650 acre-feet per year (AFY). The current Safe Yield is 6,700 AFY (BBW(c), pp. 1-2). The 2004 Judgment assigned the original Sunny-Cal properties a total of 1,784 AF of overlying water rights. Subsequent actions removed six parcels totaling 138.14 acres, thus decreasing the Sunny-Cal water right to 1,439.5 AF (BBW(b) Resolutions 2006-02, -04, -05, -06, -07, and -08). Based on the current Safe Yield, the current water right attributable to the Project parcels is 1,114.99 AF (BBW(a), Table 3-6).

1.3 Proposed Project

The Exeter Property Group is processing an application with the City of Beaumont to adopt the *Beaumont Summit Station Specific Plan* ("Project"), which is a comprehensive

[1] Safe Yield is defined in the 2004 Judgment as, "The maximum quantity of water which can be produced annually from a groundwater basin under a given set of conditions without causing a gradual lowering of the groundwater level leading eventually to depletion of the supply in storage." Pursuant to the Judgment, the Safe Yield is reevaluated every 10 years.

amendment to, and restatement of, the 2007 Sunny-Cal Specific Plan (Kimley-Horn, p. 1-1). The Project Specific Plan will be accompanied by an Environmental Impact Report (EIR) that has been prepared pursuant to CEQA. The City of Beaumont is the lead agency responsible for certification of the Project EIR and therefore, this Project is considered to be "subject to CEQA" pursuant to CWC section 10910. The Project site is located within the service area of BCVWD, which provides potable and non-potable water service to the City of Beaumont and potable water service to the unincorporated community of Cherry Valley. Based on the proposed conceptual land use plan described below, the Project is considered a "project" that warrants a WSA pursuant to the following Water Code definition (CWC section 10912(a)):

> *(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.*

The Project encompasses 181.3 net acres (188.03 gross acres) of the former Sunny-Cal Specific Plan, which is located in the northwest portion of the City of Beaumont. The Project is located south of Cherry Valley Blvd., north of Brookside Ave., and east of Interstate 10. The following Assessor Parcel Numbers (APNs) are associated with the Project site: 407-230-22, -23, -24, -25, -26, -27, -28, 407-190-016, and -017. The entire Project site is currently designated by the City General Plan land use plan as Single-Family Residential with a zoning designation of Specific Plan. The Project includes a City of Beaumont General Plan Amendment, Specific Plan Amendment, Tentative Parcel Map, Plot Plan Approval, and a Development Agreement.

The Project would allow for up to a maximum of 2,707,465 square feet (SF) of mixed commercial, warehouse/e-commerce, and office uses and approximately 30.6 net acres of passive open space (Kimley-Horn, p. 2-1) (**Figure 1-2 – Conceptual Site Plan**).

The Project site is divided into five parcels that are grouped into three Planning Areas (PA's) (Kimley-Horn, p. 2-4; NOP):

- PA 1 - E-Commerce
    - PA 1 includes Parcels 1, 2, and 3 that are proposed to be developed with three separate e-commerce buildings, as follows: Building 1 (985,860 SF), Building 2 (1,213,235 SF), and Building 3 (358,370 SF). The total warehouse floorspace is 2,507,465 SF and the total office space is 50,000 SF for a total of 2,557,465 SF in PA 1.
    - E-commerce uses may include light industrial buildings, research and development, warehousing and distribution, fulfillment, and showroom space. The e-commerce planning area comprises approximately 139.8 net acres, or approximately 77 percent of the site.
    - The Project proposes to amend the existing City of Beaumont General Plan land use designation from Single-Family Residential to Industrial for Parcels 1, 2, and 3.
- PA 2 – Commercial
    - PA 2 includes Parcel 4 that is proposed to be developed with up to 150,000 SF of commercial uses, as follows: four-story hotel (100,000 SF and 220 hotel rooms), restaurant (25,000 SF), and retail (25,000 SF).
    - The commercial component may contain a variety of commercial uses, including an assumption of hotel, general retail, and food service uses. This PA comprises approximately 10.9 net acres, or approximately 6 percent of the site.
    - The Project proposes to amend the existing City of Beaumont General Plan land use designation from Single-Family Residential to General Commercial for Parcel 4.
- PA 3 - Open Space
    - PA 3 includes Parcel 5 and would remain as open space including slopes and a natural drainage feature with 30.6 net acres or approximately 17 percent of the site.
    - The Project proposes to amend the City General Plan land use designation from Single-Family Residential to Open Space for Parcel 5.

The Conceptual Site Plan is not a firm site plan and might be subject to change; however any changes are limited to the design standards of the Project Specific Plan and shall not exceed the square footages described herein (p. 2-1).

BCVWD owns and operates existing potable and non-potable water lines in neighboring streets to the Project site; specifically, a 24-inch diameter water line in Cherry Valley Blvd. and a 24-inch diameter water line in Brookside Avenue. The Project site also contains one active BCVWD well (Well 29). BCVWD plans to add additional potable and non-potable facilities in and around the Project site. A fire flow of 4,000 gallons per minute (gpm) at 20 pounds per square inch (psi) for four hours will be required for the Project. If approved by the Board of Directors for service, BCVWD will provide the Project proponent a Plan of Service with Development Conditions stipulating what improvements will be required as part of the Project.

As of 2014, the nine APNs associated with the Project site have 1,114.99 AF in overlying water rights (BBW(a), Table 3-6).[2]

1.4 Prior Water Supply Assessment

Several different development projects have been proposed on the Sunny-Cal parcels over the years. In 2005, BCVWD prepared a WSA for the Sunny-Cal Specific Plan project as it was then-proposed prior to certification of the 2007 EIR with approximately 324 acres and 907 residential units, two parks, and 10 acres of commercial use (BCVWD(a), p. 1). This WSA determined that plan of development would require up to 706 acre-feet per year [AFY]) of water, including 588 AFY of potable water and 118 AFY of irrigation or recycled water, and concluded that sufficient supplies of water were available to meet the demands of the project for 20 years. This conclusion was based on the property owner's overlying water right entitlement being more than sufficient to meet the needs of the project over 20 years.

[2] Exhibit D of the 2004 adjudication includes a 10th APN (406-080-013) which is no longer existing.

Subsequent to the 2005 WSA, the 2007 Sunny-Cal Specific Plan was approved with an estimated 560 dwelling units and a projected water demand of 531 AFY (Stantec, p. 1.6).

In 2015, BCVWD approved an updated "Will-Serve Letter" and annexation of Sunny-Cal Specific Plan Project Tentative Tract Map 36583 (TTM 36583, p. 107 of 115). TTM 36583 proposed 497 dwelling units and BCVWD estimated a project water demand of approximately 472 AFY.

Water Code section 10910 allows a project to depend on a prior WSA unless one of three conditions exist, as provided below. Because the Project area and land uses are substantially different than that which was described in the 2005 WSA and the overlying water right has been adjusted since the 2004 adjudication was issued, this WSA has been prepared instead of relying on the previous BCVWD-approved 2005 WSA.

Law

CWC Section 10910:

> *(h) Notwithstanding any other provision of this part, if a project has been the subject of a water assessment that complies with the requirements of this part, no additional water assessment shall be required for subsequent projects that were part of a larger project for which a water assessment was completed and that has complied with the requirements of this part and for which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has concluded that its water supplies are sufficient to meet the projected water demand associated with the proposed project, in addition to the existing and planned future uses, including, but not limited to, agricultural and industrial uses, unless one or more of the following changes occurs:*
>
> > *(1) Changes in the project that result in a substantial increase in water demand for the project.*
> >
> > *(2) Changes in the circumstances or conditions substantially affecting the ability of the public water system, or the city or county if either is required to comply*

with this part pursuant to subdivision (b), to provide a sufficient supply of water for the project.

(3) Significant new information becomes available which was not known and could not have been known at the time when the assessment was prepared.

1.5 Project Relation to the Urban Water Management Plan

BCVWD is the water supplier for the Project and has prepared a 2020 Urban Water Management Plan (UWMP), a copy of which is provided in Appendix A. The 2020 UWMP was adopted by the BCVWD Board of Directors on August 26, 2021. The BCVWD 2020 UWMP took a project-based approach to estimating future water demands. Table 3-7 of the 2020 UWMP lists "Sunny Cal Egg Ranch" as a future development project with 529 probable equivalent dwelling units (EDUs) and an estimated build-out year of 2040 (UWMP, p. 3-19). An EDU is typically defined as one single-family residential household. BCVWD Regulations for Water Service,[3] Section 5 defines an EDU as 580 gallons per day (GPD), which is equivalent to 0.65 AFY/EDU. The 2020 UWMP uses a unit demand of 0.65 AFY/EDU for all EDUs constructed prior to 2018 and 0.546 AFY/EDU for all EDUs constructed after 2018 (UWMP, p. 4-10). The water demand associated with the future EDUs in Table 3-7 of the 2020 UWMP, including 529 EDUs for Sunny Cal Egg Ranch, are accounted for in the District's water demand projections in the UWMP (p. 4-12).

Pursuant to Water Code, if a project's water demand has been accounted for in the water supplier's most recent UWMP, then the WSA may use the UWMP as the source of the information required in the WSA. The determination as to whether the Project's water demand has been accounted for in the most recent UWMP is located in Section 2 – Water Demand Analysis.

Law
CWC Section 10910:

[3] Beaumont-Cherry Valley Water District Regulations Governing Water Service, February 2000.

(c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code [CEQA]*, 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).*

(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).

(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.

(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.

1.6 Statewide and Local Water Conservation Efforts

Governor Brown proclaimed a statewide State of Emergency due to ongoing drought conditions on January 17, 2014. Since then, at least six Executive Orders and other Proclamations have been issued in response to impacts from extended statewide drought conditions. Executive Order B-37-16 issued on May 9, 2016, established a new water use efficiency framework for California. The order established longer-term water conservation measures that include permanent monthly water use reporting, new urban water use targets, reducing system leaks and eliminating wasteful practices, strengthening urban drought contingency plans and improving agricultural water management and drought plans. On April 7, 2017, Governor Brown issued Executive Order B-40-17 that ended the drought State of Emergency in most of California including Riverside County. The Executive Order maintains the mandatory water reporting requirements and prohibitions on wasteful practices contained in Executive Order B-37-16, as described previously. In a related action, State agencies released a plan to implement Executive Order B-37-16 entitled, "Making Water Conservation a California Way of Life."

The City of Beaumont and Riverside County have been continually updating their landscape ordinances in response to directives from DWR. The most recent DWR Model Water Efficient Landscape Ordinance version was July 2015. The Beaumont City Council adopted Ordinance No. 1069 on January 1, 2016 to establish minimum landscape standards. It is codified in Chapter 17.06 (Landscaping) of the Beaumont Municipal Code. "Turf irrigation, even with non-potable water, may not be allowed unless there is a recreational purpose for the turf. The City of Beaumont's Ordinance effectively prohibits new, natural turfgrass lawns in the front yard of new residential subdivisions and medians and parkways along roads" (UWMP, p. 4-10).

In October 2014, the BCVWD Board adopted Resolution No. 2014-05 which suspends the issuance of will serve letters during statewide drought conditions, while there are

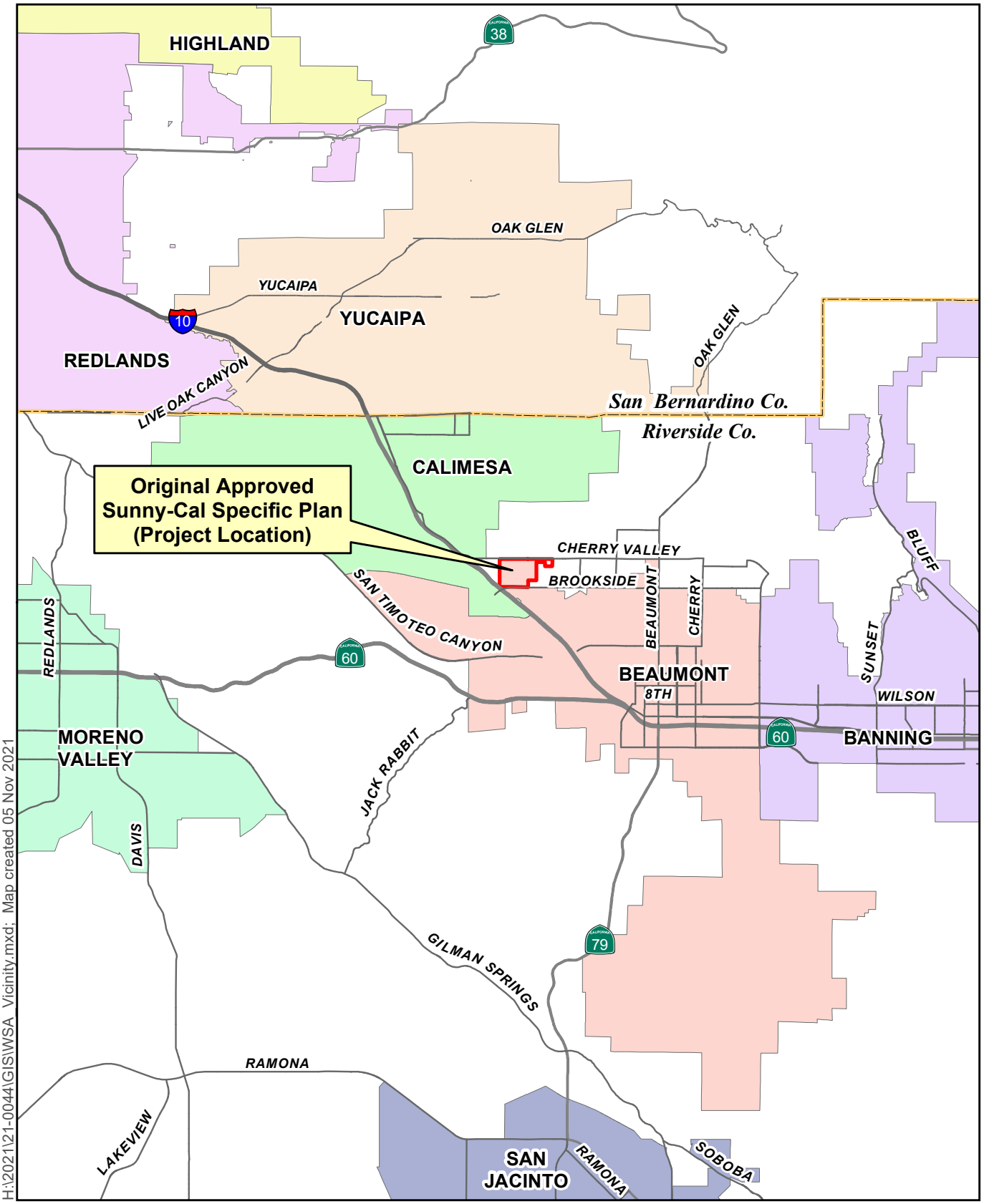
mandatory conservation measures applicable to the District's ratepayers, or when BCVWD's supplies are less than the projected demands for five years (UWMP, p. 4-11).

The BCVWD Board of Directors adopted Resolution No. 2015-05 which implemented, among other things, a limit on landscape watering to twice per week. BCVWD Resolution No. 2016-05 rescinded the landscape watering restrictions of Resolution No. 2015-05 but did maintain the other conservation measures from the State Water Board May 18, 2016, Drought Emergency Water Conservation Regulations, which was designed to prevent waste and unreasonable use of water and promote water conservation (UWMP, p. 4-11). Resolution No. 2016-05 is currently implemented and has not been rescinded to date (UWMP, p. 9-3).

1.7 Methodology of Analysis

This Assessment follows the DWR *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001* (DWR 2003). Section 1 of this Assessment describes the existing and proposed land use designations of the Project site, the proposed Project's relation to a previous WSA and the water supplier's most recent UWMP. Section 2 provides the water demand analysis of the Project; Section 3 reviews the projected water supplies for the Project; Section 4 contains the required discussion of the water supplier's groundwater supplies; and Section 5 concludes the Assessment by answering the primary question at hand: whether the projected supply for the next 20 years, based on normal, single dry and multiple dry years, will meet the demand projected for the project plus existing and planned future uses, including agricultural and manufacturing uses.

This Page Intentionally Left Blank.



H:\2021\21-0044\GIS\WSA_Vicinity.mxd; Map created 05 Nov 2021

Sources: Stantec 2007; Riverside County GIS; 2021; San Bernardino Co. GIS, 2021

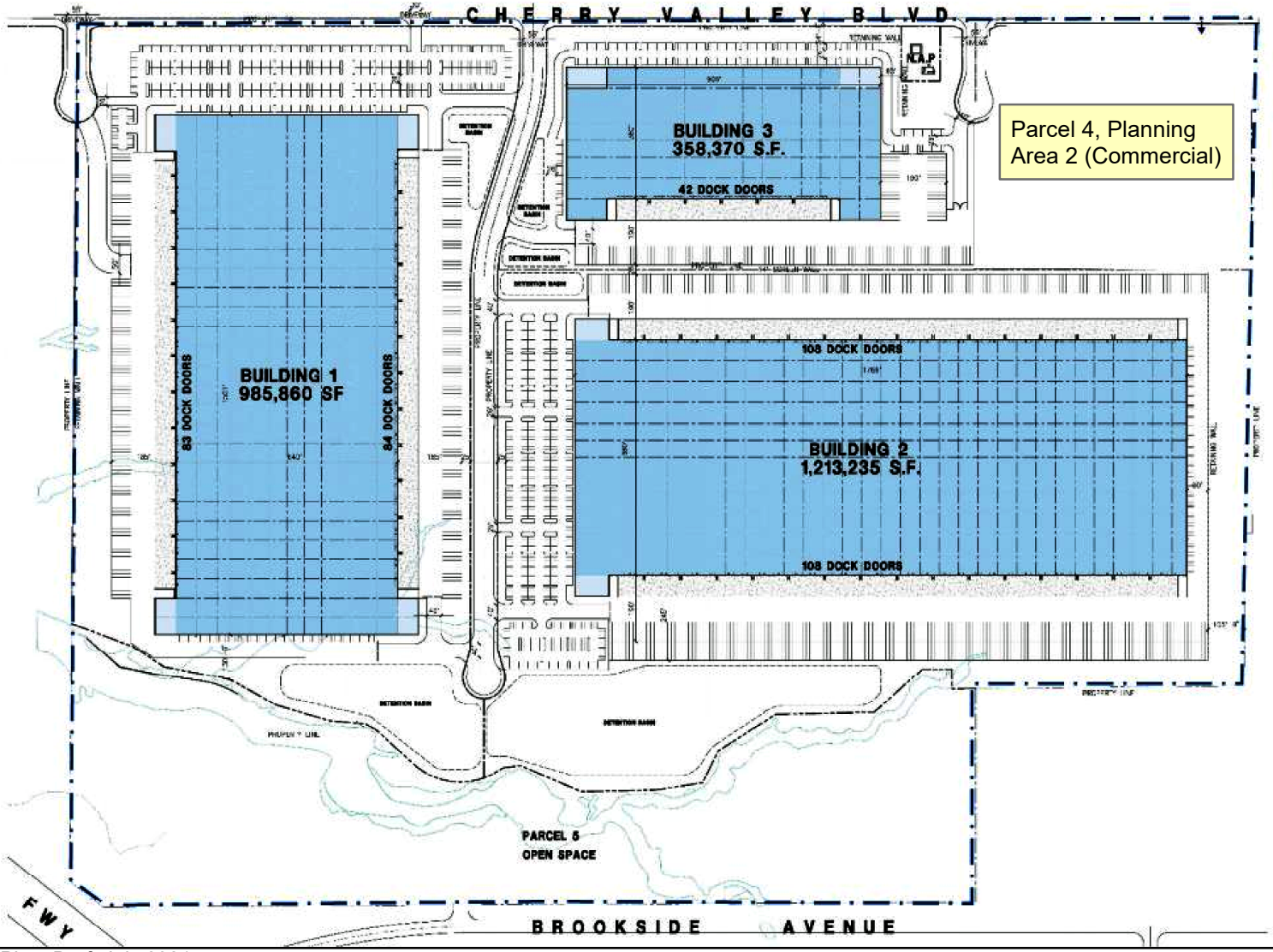
0 1 2 3 4 Miles

Figure 1-1 – Vicinity Map

Beaumont Summit Station

ALBERT A. WEBB ASSOCIATES

This Page Intentionally Left Blank.



H:\2021\21-0044\GIS\WSA_Site_Plan.mxd; Map revised 17 Nov 2021

Station Specific Plan, Draft July 2021

Note: This conceptual site plan is shown for illustration purposes as one potential layout. Final site planning will be provided as part of implementing project site plan review submittals.

Not to Scale

Figure 1-2 - Conceptual Site Plan

Beaumont Summit Station

ALBERT A. WEBB ASSOCIATES

This Page Intentionally Left Blank.

SECTION 2 - WATER DEMAND ANALYSIS

The purpose of this section is to evaluate whether the proposed Project was considered in the water supplier's planning for water demand. This section will: 1) identify the various water use sectors, 2) identify water demand by those sectors for the next twenty years, and 3) compare the calculated water demand of the proposed Project to the water demand assumed in the most recent UWMP for the same property.

2.1 Estimated Project Water Demand

The proposed Project land use summary is shown in **Table 2-1** and in Figure 1-2 (located in Section 1).

Table 2-1 Project Land Use Summary

	Planning Area 1			Planning Area 2	Planning Area 3	TOTAL	
	Parcel 1 BLDG. 1	Parcel 2 BLDG. 2	Parcel 3 BLDG. 3	Parcel 4	Parcel 5		
SITE AREA							
Net Area (ac)[1]	52.39	66.71	20.72	10.89	30.59	181.30	ac
Gross Area (ac)	55.19	67.86	22.37	11.44	31.17	188.03	ac
BUILDING AREA							
Office	20,000	20,000	10,000	-	-	50,000	s.f.
Warehouse	965,860	1,193,235	348,370	-	-	2,507,465	s.f.
Hotel (220 keys)	-	-	-	100,000	-	100,000	s.f.
Retail	-	-	-	25,000	-	25,000	s.f.
Restaurant	-	-	-	25,000	-	25,000	s.f.
TOTAL	985,860	1,213,235	358,370	150,000	-	2,707,465	s.f.
MAXIMUM FLOOR AREA RATIO							
FAR - 1.0							

From HPA, Inc., July 26, 2021. Parcel 4 square footages from Kimley-Horn, p. 1-5.
ac = acre; s.f. = square feet; FAR = floor-to-area ratio.
(1) Road dedication is 6.73 acres.

The unit water demand factors used to calculate the Project's estimated water demand are described below and calculations are shown in **Spreadsheet 1**, below.

- **Planning Area 1:** The potable water demand factor is 15 GPD/employee, with the number of employees sourced from the Project 's traffic study (2,011 in Planning Area 1). This is slightly higher than an estimate using the oft-cited 2010 National Association of Industrial and Office Properties (NAIOP) study.[1] Potable water demand in PA 1 is measured over365 operating days per year, which is more than the 260 days used in certain other BCVWD WSA's and a 2010 U.S. Department of Energy Study (USDE, 2010). The non-potable (landscaping) water demand factor is 1,835.6 GPD/acre (or 670,000 gallons per year per acre) and 365 days per year.[2]

- **Planning Area 2:** Potable water demand factors used are 100 GPD/hotel room assuming 220 rooms, 1 GPD/SF (or 1,000 GPD/kSF) for "general retail" and "food uses." These unit water demand factors are consistent with those used in the 2021 BCVWD Beaumont Pointe WSA which states they are "based on typical water usage used by water agencies throughout southern California" (p. 12). The landscaped area for Planning Area 2 is estimated as 15 percent of the net area. The non-potable water demand factor used for Planning Area 1 was also used for Planning Area 2 (i.e., 1,835.6 GPD/acre). Both potable and non-potable water demand in this planning area is assumed to be in use 365 days per year.

- **Planning Area 3:** Planning Area 3 is planned as passive open space. According to the Office of the Fire Marshal who was consulted during preparation of this Assessment, the Project site does not fall within the Very High Fire Hazard Severity Zone; therefore, no fuel modification zone will be required by the fire

[1] Hidden Canyon Industrial Park (2019, p. 112) and Beaumont Pointe Water Supply Assessments (Mar. 2021, p. 12), based their employee counts on a 2010 NAIOP Research Foundation study (NAIOP), which is 1 employee per 1,500 SF of warehouse and office space.
[2] This is the same factor used for the Beaumont Pointe Water Supply Assessment (2021, p. 12).

department. Because it is planned as passive open space and no fuel modification zone will be required, the water demand was assumed to be zero.

In future detailed site plans, the Project will need to demonstrate consistency with the City of Beaumont Landscaping Standards located in City Municipal Code Chapter 17.06, which require efficient systems and plants with low-water-demands.

As shown in Spreadsheet 1 and based on the Project information provided to-date, the potable water demand is estimated at 114 AFY and non-potable water demand is 69 AFY for a total estimated water demand of 183 AFY. The potable water demand is equivalent to 210 EDU's using the District's factor of 0.546 AFY per EDU.

The District's 2020 UWMP plans for development of the Project site according to the existing land use designation and approved Specific Plan, which is Single-Family Residential and 529 EDUs with build-out of the property occurring by 2040 (UWMP, p. 3-19). According to the City of Beaumont Zoning Map, the Project site is currently zoned Specific Plan (GP, 2020). The original Specific Plan was approved for up to 560 dwelling units and BCVWD estimated a water demand of 531 AFY, which is more than triple the estimated potable and non-potable water demand of the Project (i.e., 183 AFY).

Beaumont Summit Station Specific Plan Project Water Demand

Proposed Land Use Designation						Water Demand							
Planning Areas	Project Land Use	Project Gross Acres (AC)[1]	Project Net Acres (AC)[1]	Project Building Maximum Square Footage (SF) [10]	Employee Count [5]	Potable Indoor Unit Water Demand Factor [6]	Potable Indoor Unit Water Demand Factor Units[6]	Non-Potable Irrigation Unit Water Demand Factor (GPD/AC)[8]	Daily Potable Indoor Water Demand (GPD)	Yearly Potable Indoor Water Demand (AFY) [7]	Daily Non-Potable Irrigation Water Demand (GPD) [9]	Yearly Non-Potable Irrigation Water Demand (AFY)	Yearly Potable and Non-Potable Water Demand (AFY)
PA 1 (Parcels 1, 2, 3) (Bldgs 1, 2, 3)	**E-Commerce Center Total[2]**	**145.42**	**139.8**	-	-	-	-	-	-	-	-	-	-
	Parcel 1, Bldg. 1	55.19	52.39	-	-	-	-	-	-	-	-	-	-
	Bldg. 1 Landscaping	-	11.88	-	-	-	-	1,835.6	-	-	21,801	24.4	24.42
	Parcel 2, Bldg. 2	67.86	66.71	-	-	-	-	-	-	-	-	-	-
	Bldg. 2 Landscaping	-	15.74	-	-	-	-	1,835.6	-	-	28,897	32.4	32.36
	Parcel 3, Bldg. 3	22.37	20.72	-	-	-	-	-	-	-	-	-	-
	Bldg. 3 Landscaping	-	4.14	-	-	-	-	1,835.6	-	-	7,600	8.5	8.51
	Warehouse (Total)	-	-	2,507,465	2,011	15	GPD/employee	-	30,165	33.80	-	-	33.80
	Office (Total)	-	-	50,000									
								PA 1 Subtotal	**30,165**	**34**	**58,297**	**65**	**99**
PA 2 (Parcel 4)	**Commercial [3]**	**11.44**	**10.9**	-	-	-	-	-	-	-	-	-	-
	Landscaping (15% of net)	-	1.63	-	-	-	-	1,835.6	-	-	2,998	3.4	3.36
	Hotel (220 keys)	-	-	100,000	-	100	GPD/key	-	22,000	24.65	-	-	24.65
	General Retail (Total)	-	-	25,000	-	1,000	GPD/kSF	-	25,000	28.01	-	-	28.01
	Food Uses (Total)	-	-	25,000	-	1,000	GPD/kSF	-	25,000	28.01	-	-	28.01
								PA 2 Subtotal	**72,000**	**81**	**2,998**	**3**	**84**
PA 3 (Parcel 5)	**Open Space (passive)[4]**	**31.17**	**30.59**	-	-	-	-		-	-	-	-	0
Total		**188.03**	**181.30**	**2,707,465**	**-**	**-**	**-**	**-**	**102,165**	**114**	**61,296**	**69**	**183**
Equivalent Dwelling Units (EDU) (based on 0.546 AFY/EDU and potable water demand):				**210**									

[1] Acreages from Albert A. Webb Associates, Beaumont Summit Station Property Acreage (7/13/2021). As stated in the Draft Beaumont Summit Station Specific Plan (07/02/2021), *The final site plan presented for entitlement approval by the City may differ based on final design; however, the square footages outlined in Table 2-1 shall not be exceeded (p. 2-1).*

[2] *Planning Area 1…may include light industrial buildings, research and development, warehousing and distribution, fulfillment, and showroom space* (Draft Beaumont Summit Station Specific Plan, p. 2.4). Landscape area per building from Kimley-Horn (email, 07/23/21).

[3] *Planning Area 2 - commercial uses within the Specific Plan area will be flexible depending on market conditions and may contain a variety of commercial uses, including an assumption of hotel, general retail, and food service uses.* (Draft Beaumont Summit Station Specific Plan, p. 2-4). Landscape area is currently unknown and therefore assumed to be 15% of net area, consistent with the Lanscape Standards of the Specific Plan (p. 4-22). Potable and non-potable use is 365 days per year.

[4] *Planning Area 3…contains slopes and a natural drainage feature…the drainage has been avoided by the land use plan.* (Draft Beaumont Summit Station Specific Plan, p. 2-4) We have assumed no water demand.

[5] From Project Vehicle Miles Traveled (VMT) analysis (Kimley-Horn, personal communication, Nov. 9, 2021). This is greater than an alternative method from a NAIOP National Research Foundation 2010 study that estimated 1 employee per 1,500 SF of warehouse/office space. (NAIOP Research Foundation, Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space, L. Nicolas Ronderos, Director, Urban Development Programs Regional Plan Association, March 2010)

[6] Based on Hidden Canyon Industrial Park WSA, which says the project developer estimated 15 gallons per day per employee and then the District validated the estimate using District records (Draft Hidden Canyon Industrial Park WSA (02-13-2019), p. 112 of 183)

[7] Total potable water demand for PA 1 is based on 365 days in a year. From 2010 U.S. Dept. of Energy (USDE) study, *Commercial buildings energy consumption survey water consumption in large buildings summary.* (as referenced in Potrero Logistics WSA, 2020, p. 222 of 308). Potable water demand for other PA's is based on 365 days in a year.

[8] Same as 670,000 gallons per acre per year (365 days) outdoor water demand factor used for Amazon Distribution Center (*Water Supply Assessment for Beaumont Pointe Comercial and Industrial Project*, p. 12)

[9] The landscaped area is currently unknown and therefore estimated at 15% of the net planning area. This is consistent with the *Water Supply Assessment for Beaumont Pointe (2021), p. 12).*

[10] From HPA, Inc. (email, 07/26/2021)

2.2 Districtwide Demographic Factors

A variety of demographic factors may affect water use. The UWMP Act lists several demographic factors to be detailed in UWMP's including climate, current and projected population, density, and the mix of customer types (CWC sections 10631(e)(1)-(2)). As suggested by DWR, these data are summarized below from BCVWD's 2020 UWMP (Appendix A).

Climate

According to the Koppen Climate Classification System, the Beaumont and Cherry Valley area has a Cold Semi-Arid to Hot-Summer Mediterranean Climate, which is characterized by warm, dry summers and cold winters with limited rainfall. Temperatures below freezing are common in winter in the upper elevations of the service area. Temperatures over 100°F are also common in the summer. Virtually all the precipitation occurs during the months of November through April; most of the precipitation is in the form of rain, but snow is common in higher elevations of the service area during the winter. Some rainfall occurs in summer from thunderstorms that are associated with monsoonal moisture. Annual precipitation in Beaumont (2680 MSL) averages approximately 17.8 inches, with increasing amounts of precipitation with increasing elevation. (UWMP, pp. 3-4, 3-5)

Population

The current (2020) estimated population served by the District is 59,258, as shown in **Table 2-2**. The City of Beaumont is currently experiencing rapid growth and is expected to nearly double in population by 2045. Future water demand estimates are based on the assumptions that the City's (and Cherry Valley) population and housing units will increase at a consistent rate with the total water demand per capita remaining relatively stable. (UWMP, p. ES-4). The build out population within the District's Sphere of Influence (SOI) is estimated to be about 147,620 based on BCVWD estimates of current and proposed land use in the area (UWMP, p. 3-2).

Table 2-2 BCVWD Service Area Population Estimates, 2020-2045

Population Served	2020	2025	2030	2035	2040	2045
	59,258	66,149	73,739	81,906	88,532	94,556

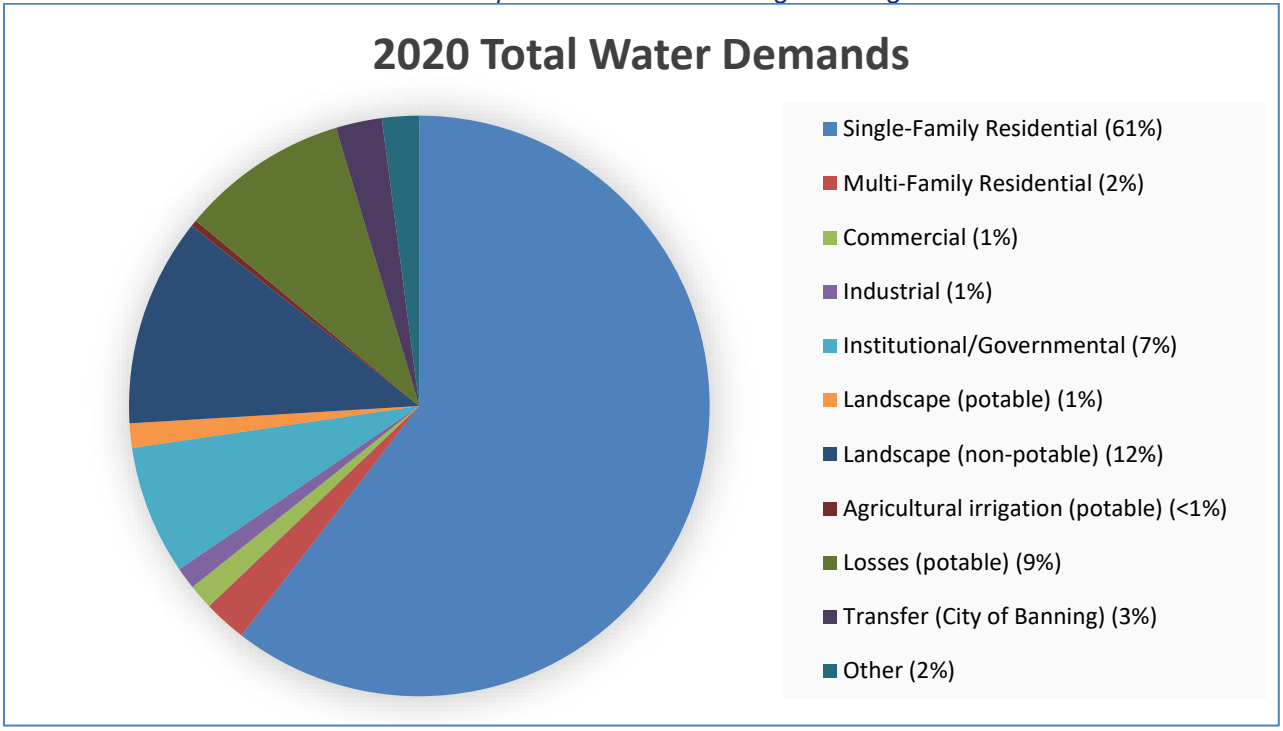
Notes: From BCVWD 2020 UWMP, p. 3-2.

Approximately 12,400 EDUs for known projects that have yet to be constructed are in-progress or planned for the future. This includes projects within the BCVWD service area and within the BCVWD SOI. BCVWD used an average of 470 additional EDUs per year from 2020 through 2045 to estimate population and water demand growth rates in the 2020 UWMP (pp. 3-19, 3-20).

2.3 BCVWD's Current and Future Water Demand

At the end of 2020, BCVWD provides potable and non-potable water service to about 19,215 active accounts (19,659 connections) (UWMP, p. 3-1). Further, the potable water demand was 10,845 acre-feet (AF) and the non-potable water demand (including supplemental potable water) was 1,647 AF for a total of 12,492 AF (not including system losses of 1,326 AF) in UWMP 2020 (p. 4-6). The proportions of BCVWD's individual water demand for CY 2020 are illustrated in **Chart 2-1**, below.

Chart 2-1 - BCVWD 2020 Total Water Demands
Source: BCVWD 2020 UWMP, p. 4-8.
Note: Total does not include additional imported water for banking to storage.



The recorded water demands by customer type for BCVWD service area are provided in **Table 2-3**.

Table 2-3 Recorded BCVWD Water Demands (AFY)

	1990	2000	2005	2010	2015	2020
Potable Water	5,572	6,308	8,268	9,201	9,278	10,845
Non-Potable Water[3]	-	-	1,038	1,822	514	1,647[1]
Total Water Demand	**5,572**	**6,308**	**9,306**	**11,023**	**9,792**	**12,492**[2]

Notes: From BCVWD 2020 UWMP, p. 4-6.

(1) Includes supplemental potable water.

(2) Does not include potable system losses of 1,326 AF (UWMP, p. 4-8).

(3) Currently supplied by Beaumont Basin potable and non-potable groundwater and therefore subject to the replenishment obligations of the Judgment (imported water). Most of this non-potable demand will be met with recycled water when it becomes available, and imported water replenishment of the Beaumont Basin will be reduced (UWMP, p. 4-6).

"The drought from 2013–2015 or so resulted in significant water conservation measures imposed which caused a great reduction in water use around 2015. There has since been an increase in the potable and non-potable water demand as the water conservation measures have since been relaxed and as development continues to occur in the District's service area. However, a reduction in BCVWD's potable and non-potable water demand is anticipated in the future with the enforcement of more stringent landscaping ordinances, reduction in indoor per capita water use and outdoor water budgets, an increase in use of "water efficient" fixtures in homes and commercial/industrial businesses, and conversion of turfed street medians to low-water using plant materials (even if irrigated with recycled water) (UWMP, pp. 4-6, 4-7)."

The projected Districtwide water demands from 2025 to 2045 are shown in **Table 2-4** (next page)**.**

Table 2-4 Projected Future BCVWD Water Demand (AFY)

Customer Type	2025	2030	2035	2040	2045
Single Family Residential	9,302	10,047	10,849	11,479	12,041
Multifamily Residential	367	397	429	454	476
Commercial	214	231	249	264	276
Industrial	186	201	217	230	241
Institutional/Governmental	1,106	1,194	1,290	1,365	1,431
Agricultural Irrigation	55	60	64	68	72
Landscape (potable)	209	226	244	258	271
Other (potable)[1]	318	343	370	392	411
Other (non-potable)[2]	276	246	228	278	328
Groundwater Recharge[3]	1,500	1,200	1,000	1,000	1,000
Losses (estimated)	1,499	1,614	1,738	1,835	1,922
Subtotal	15,032	15,759	16,678	17,623	18,469
Recycled Water[4]	2,233	2,421	2,706	2,840	2,906
Total	17,265	18,180	19,384	20,463	21,375

Notes: From BCVWD 2020 UWMP, p. 4-12. Projected water use by sector based off of water demand distribution by sector for 2020. Groundwater recharge quantities are planned quantities to build and maintain 5-year supply per BCVWD Resolution No. 2014-05; landscape demand will be met with recycled water and supplemented with other non-potable water as needed.

(1) Metered construction and street sweeping water, etc.

(2) Raw water to supplement non-potable water system (used for irrigation)

(3) Imported raw water banked for future extractions during dry periods. Does not include imported water to meet adjudication replacement obligations.

(4) From UWMP, p. 6-50. "The recycled water demand includes the forecast amount used on landscaping irrigated by the non-potable water system. Source of recycled water is the City of Beaumont. Also includes a portion of the golf course irrigation demands of 268 and 203 AFY for Tukwet Canyon and Oak Valley Greens, respectively (UWMP, p. 4-14)."

Water use patterns change during dry years. The expected changes to water demand and water supply during dry years are provided in Section 3 – Water Supply Analysis.

Conclusion

The estimated potable water demand for the proposed Project is 114 AFY and the non-potable water demand is 69 AFY. The estimated potable water demand is equivalent to serving 210 EDUs (Spreadsheet 1). The estimated total water demand for the previously approved Specific Plan on the same property is 531 AFY and 560 DUs, and this is commensurate with the number of EDUs that the District assumed for buildout of the property and its water demand projections in the 2020 UWMP (i.e., 529 EDUs). The development proposed by the Project is a reduction in projected water use of approximately 348 AFY. Because the water supplier's water demand projections assumed a higher development density based on a previously approved project, than that which is proposed by the Project for the same property, it can be deduced that the water demand for the Project was accounted for in the most recently adopted 2020 UWMP.

Remainder of Page Left Blank

SECTION 3 - WATER SUPPLY ANALYSIS

This section identifies the sources of potable water utilized and available to the water supplier of the proposed Project. The purpose of this section is to evaluate the water supplies that could be utilized by the proposed Project during normal, single-dry, and multiple-dry water years during a 20-year projection.

BCVWD is the water supplier to the City which includes the proposed Project. BCVWD has two sources of potable water supply: District wells in Edgar Canyon (Little San Gorgonio Creek) and the Beaumont Groundwater Basin (Beaumont Basin). The Beaumont Basin is an adjudicated basin. BCVWD also produces non-potable water from a District well in the Beaumont Basin. Recycled water is not yet available for distribution to BCVWD customers from the City of Beaumont Wastewater Treatment Plant. BCVWD purchases imported State Water Project (SWP) water from San Gorgonio Pass Water Agency (SGPWA) for the purpose of recharging the Beaumont Basin; SWP water is not currently distributed directly to BCVWD customers. A copy of SGPWA's 2020 UWMP is located in Appendix B.

Law

CWC 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.*
>
> *(2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is*

required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

3.1. Documenting Wholesale Water Supplies

Many retail water suppliers in California, including BCVWD, receive supplies from one or more water wholesalers. SB 610 requires the WSA to document wholesale supplies received by: 1) describing the quantities of water received from each wholesaler in prior years; 2) identifying existing entitlements, water rights, and/or water service contracts held by the District for the wholesale supply; 3) provide proof of entitlements, water rights, service contracts, relevant capital outlay programs, and construction permits for necessary infrastructure to deliver wholesale supplies, if any; and 4) regulatory approvals required to convey or deliver the wholesale supply.

Wholesale Supplies Received

BCVWD receives wholesale water supplies from the SGPWA for the purpose of groundwater recharge in the Beaumont Basin at the District's Noble Creek Recharge Facility and long-term banking in the Beaumont Basin to improve overall supply reliability. SGPWA is a SWP Contractor, acting as a wholesale water purveyor of SWP water from the Sacramento/San Joaquin Delta via the SWP facilities to retail water suppliers and other water users in its service area. The SGPWA Law states that SGPWA was created, in part, to eliminate groundwater overdraft conditions in the SGPWA service area (SGPWA 2021, p. ES-2). As a retailer in SGPWA's service area, BCVWD can

receive imported water that becomes available from SGPWA, and submits a water order each year to SGPWA; however, no contract exists between the agencies to specify a delivery amount (a copy of SGPWA Law is located in Appendix C). Pursuant to the contract with the California Department of Water Resources (DWR), SGPWA has a Table A (maximum) allocation of 17,300 AFY (a copy of said contract and amendments thereto are located in Appendix D). In addition to BCVWD, the other major water retailers in the SGPWA service area include the City of Banning, Yucaipa Valley Water District (YVWD), Banning Heights Mutual Water Company, High Valley Water District, South Mesa Mutual Water Company, and Cabazon Water District. As of 2020, just BCVWD, YVWD, and the City of Banning have taken imported water and BCVWD receives the majority of the SWP delivered to SGPWA (UWMP, p. 6-5).

SGPWA imports water delivered by the East Branch Extension (EBX) of the State Water Project; which flows by gravity from the EBX directly to the SGPWA's recharge basins or by gravity to retail water suppliers (SGPWA 2021, p. 2-10). SGPWA owns capacity rights in varying amounts to the various facilities that bring water to BCVWD's point of connection. BCVWD takes the raw SWP water from a 20-inch diameter turnout and metering station at the "Noble Creek Turnout" located at the current end of the EBX at Orchard Ave. and Noble Creek in Cherry Valley. The turnout has a capacity of 34 cubic feet per second (cfs) as of 2019. BCVWD's system conveys the import water to the District's Noble Creek Recharge Facility. The recharge facility consists of 14 ponds within approximately 27 acres (UWMP, p. 6-13; SGPWA, p. 3-5).

SWP water is available as stipulated by DWR in response to the hydrology and environmental regulations that can change available supply.[1] Therefore, imported water supplies to southern California can be highly variable; in January 2014 for example, the allocation of State Water Project water to all contractors was reduced to 0 percent due to persistent drought conditions. Table 6-2 in BCVWD's 2020 UWMP illustrates the variability in the amount SGPWA receives each year and the proportion available to

[1] DWR, *State Water Project Delivery Capability Report*, published every 2 years, as well as "Notice to State Water Project Contractors" issued as often as needed.

BCVWD (refer to Appendix A, p. 6-5). Shown on said page are SGPWA SWP deliveries which varied from 3,930 AF in 2015 up to 15,843 AF in 2017. Further, BCVWD's proportionate share of SGPWA's SWP deliveries has ranged from a low of 41.4% in 2009 to a high of 96.4% in 2019.

SGPWA has projected in its 2020 UWMP to have "reliable water supplies through the 2045 planning horizon" to "meet SGPWA's current and 2045 future water demands in its service area" during normal or average rainfall years, during a five-year drought from 2021 to 2025, as well as a five-consecutive year drought between 2025 and 2045 (SGPWA, pp. ES-3-ES-5, p. 5-6). SGPWA's water reliability assessment for a drought lasting five consecutive years shows sufficient available supplies assuming "the retail agencies in SGPWA service area use stored water and regionally managed supplies to offset fluctuations in its SWP supplies" (SGPWA, p. ES-4).

SGPWA Resolution No. 2015-05 established "an obligation to meet the future water supply needs of the region, including BCVWD" (UWMP, p. 7-10). A copy of SGPWA Resolution No. 2015-05 is located in Appendix E. Further, "BCVWD can rely on the SGPWA to secure and deliver the imported water needed to meet BCVWD's current and future demands as set forth in this 2020 UWMP and subsequent UWMP updates in concert with DWR's Delivery Capability Reports" (UWMP, p. 7-10)

As stated in BCVWD's 2020 UWMP, "Recharge of imported water [from SGPWA] has occurred since September 2006. As of December 2020, 108,892 AF (35.5 billion gallons) of water have been recharged to BCVWD's account. Since 2006, annual recharge has averaged 7,259 AFY with a maximum of nearly 13,700 AFY" (UWMP, p. 6-13). BCVWD conservatively estimates the percolation capacity of its Noble Creek recharge facilities would be 150 AF per day and potentially 40,000 AFY (*ibid*). BCVWD monitoring well data suggest the time required for the recharge water to increase the groundwater surface elevation, including deep aquifers, is short and on the order of 60 days under saturated conditions (UWMP, p. 6-14).

The actual and projected wholesale water supplies that have been used in the past and are expected to be available in the future from SGPWA for the supply required for BCVWD through 2045 is shown in **Table 3-1**. Of the 11,005 AF recharged in the Beaumont Basin in 2020, approximately 427 AF was banked in BCVWD's groundwater storage account with the remainder to meet replacement water obligations (UWMP, p. 4-2). Table 3-1 shows the projected water supplies that will be used in the SGPWA service area from sources coordinated by SGPWA as well as BCVWD's projected imported water needs.

Table 3-1 Wholesale Water Supplies Available to SGPWA and BCVWD (AFY)

Imported Water	2010	2015	2020	2025	2030	2035	2040	2045
	Actual[a]			Projected				
SGPWA	8,403	3,930	11,469	16,234[b]	17,234[b]	27,734[b]	28,234[b]	28,734[b]
BCVWD	5,727	2,773	11,005	10,644[c]	10,746[c]	10,966[c]	11,717[c]	12,281[c]

Note: SGPWA – San Gorgonio Pass Water Agency; BCVWD = Beaumont-Cherry Valley Water District; AFY = acre feet per year.

(a) Data for 2010-2020 from BCVWD 2020 UWMP, p. 6-5 (Table 6-2 – Historical Deliveries of SPW to SGPWA and BCVWD).

(b) From SGPWA 2020 UWMP, pp. 3-31 to 3-34. Projections are the sum of SWP (10,034 AFY), SWP carryover (3,000 AFY), Yuba Accord (400 AFY), Nickle Agreement (1,700 AFY), SGPWA transfers varies from 1,100 to 3,600 AFY) and Sites Reservoir (10,000 AFY beginning in 2035).

(c) Data for 2025-2045 from BCVWD 2020 UWMP, p. 6-59. Represents total imported water required by BCVWD.

3.2. Documenting Water Supplies

The recorded water supplies available to BCVWD in CY 2020 are provided in **Table 3-2** (next page) and the projected water supplies available to BCVWD from 2025-2045 are provided in the proceeding page in **Table 3-3.** In each table the water supply source is identified as a water supply entitlement, water right, or water service contract per SB 610 guidance. Descriptions of all water supplies are located in Section 3.3. Rights to groundwater are discussed in Chapter 4 – Groundwater Analysis.

Table 3-2 Recorded BCVWD Water Supplies (AFY)

Source	2015[a]	2020[b]	Form of Right	Amount of Right
Water from Wells				
Edgar Canyon	1,418	1,279	Pre-1914 appropriative	~43,440 AFY (Safe yield is 2,200)[c]
Beaumont Basin	2,300	1,962	Appropriative Party to adjudicated basin.	Only the amount in storage or credited to BCVWD.
Water Purchased from SGPWA for Recharge of Beaumont Basin				
Replacement Water	2,090	11,005	Retail Agency within SGPWA	That which is available from SGPWA.
Banked storage	3,984	-427	Retail Agency within SGPWA	That which is available from SGPWA.
Total Supply (AFY)	**9,792**	**13,819**	**--**	**--**

Notes:

(a) From BCVWD 2015 UWMP, p. 6-61.

(b) From BCVWD 2020 UWMP, p. 6-58.

(c) See discussion in section 3.3, below. Although BCVWD has stream diversion permits for up to approximately 43,440 AFY, BCVWD assumes in the 2015 and 2020 UWMPs a safe yield of 2,200 AFY based on the results of studies by others (refer to WEI, 2005 and Hahn, 2010). Copies of the stream diversion statements are located in Appendix F.

The BCVWD Board of Directors adopted the "FY 2021 Operating and 2021-2025 Capital Improvement Budget" on December 14, 2020 (Resolution No. 2020-26). The Capital Improvement Plan (CIP) budget is a fiscal planning tool used to identify the future capital needs of the District, including when and how the projects will be financed. The CIP budget includes future water supply projects such as "Investment in Sites Reservoir Project", "2750 Zone Well in Noble Creek Regional Park", "New Beaumont Basin Well on Pardee Sundance Site", "Grand Avenue Storm Drain" and "San Timoteo Creek Non-Potable Extraction Wells" (BCVWD(e), pp. 85-87).

Table 3-3 Projected BCVWD Water Supplies (AFY)

Source	2025	2030	2035	2040	2045	Form of Right	Amount of Right
Water from Wells							
Edgar Canyon Potable Wells	2,070	2,070	2,070	2,070	2,070	Pre-1914 appropriative	~43,440 AFY (Safe yield is 2,200 AFY)
Beaumont Basin							Only the amount in storage or credited to BCVWD.
Reallocated Unused Overlier Rights	1,322	1,286	1,165	1,099	1,099	Appropriative	
Forebearance Water	471	547	1,387	1,542	1,542	Appropriative	
Return Flows	280	514	868	922	1,155	Appropriative	
Water Purchased from SGPWA for Recharge of Beaumont Basin							
Replacement Water	8,868	9,300	9,966	10,717	11,281	Retail Agency within SGPWA.	That which is available from SGPWA.
Banked storage	1,500	1,200	1,000	1,000	1,000		
Additional that may be available	1,572	396	2,389	2,994	3,769		
Infiltrated Stormwater							
Beaumont MDP Line 16	185	185	185	185	185	Appropriative	That which is available.
Misc. Stormwater	0	350	350	350	350		
Subtotal Potable	16,268	15,818	19,380	19,317	22,451	--	--
Edgar Canyon Non-Potable Wells	0	0	300	300	300	Pre-1914 appropriative	~43,440 AFY (Safe yield is 2,200 AFY)
San Timoteo Creek Non-Potable Wells	0	0	600	600	600	Appropriative	To be determined
Recycled Water	2,017	2,381	2,892	2,955	2,915	MOU	To be determined
Supplemental Imported Water to Replenish Beaumont Basin for Non-Potable Supply	276	246	0	0	0	Retail Agency within SGPWA.	That which is available from SGPWA.
Subtotal Non-Potable	2,293	2,657	3,792	3,855	3,815	--	--
Total Supply	**18,561**	**18,475**	**23,172**	**24,734**	**26,266**	--	--

Note: AFY = acre feet per year; MDP = Master Drainage Plan; MOU = Memorandum of Understanding.
Source: BCVWD 2020 UWMP, p. 6-59.

BCVWD anticipates increasing its total water supply by pursuing: 1) Beaumont Basin recharge with diverted stormwater and non-stormwater runoff at Noble Creek Recharge Facility; 2) distribution of recycled water from City of Beaumont's Wastewater Treatment Plant within the next few years; 3) utilizing non-potable groundwater in Edgar Canyon for non-potable uses; and 4) utilizing groundwater from San Timoteo Creek for non-potable purposes (UWMP, p. 6-58).

Water Supply Capacities

BCVWD relies on wells with varying pumping capacities from 100 gpm to more than 3,000 gpm. To be reliable, the well supply system must be able to provide the maximum day demand (usually, a peak summer day) with the largest source (well) out of service for maintenance or repairs (UWMP(a), p. 2). The total well capacity for wells pumping 24 hours per day in Edgar Canyon and Beaumont Basin is about 27.3 million gallons per day (mgd). With the largest well out of service, the pumping capacity for 24-hour operation is 21.5 mgd (UWMP, p. 6-32). Because of the range of topographic elevations, the District service area has 11 pressure zones and 14 reservoirs (tanks) ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 22 MG – slightly more than two average days or one maximum day (UWMP, pp. 3-25, 3-26). The required fire flow for the Project will be 4,000 gpm at 20 psi for four hours.

3.3. Descriptions of All Water Supply Projects

As shown in Table 3-2, groundwater and percolated imported water are BCVWD's only current water source (UWMP, p. 6-2). Future water sources as shown in Table 3-3 will include recycled water for landscape irrigation and could include stormwater capture and recharge from Edgar, Noble, Marshall, and other canyons, captured and recharged urban runoff, and San Timoteo Groundwater Basin to supplement the non-potable system (UWMP, p. 6-4). Potential future sources include recharging groundwater with recycled water, capturing nitrate-contaminated underflow from Edgar Canyon to supplement the non-potable system, groundwater from the Singleton Groundwater

Basin, joint projects with other agencies and exchanges, and the Sites Reservoir[2] (UWMP, p. 6-4). BCVWD is considering introducing filtered imported water directly into the non-potable water distribution system (UWMP, p. 6-2). Descriptions of all District water supply projects are provided below.

District Well Production

As described in the 2020 UWMP, BCVWD currently owns and operates 24 groundwater wells of which 20 are used regularly. Three wells have their capacity shared with the City of Banning. Thirteen of the wells are in Edgar Canyon and 11 of the wells are in the Beaumont Basin (pp. 6-17, 6-18).

Edgar Canyon wells currently (2020) provide about 10% of the District's potable water supply. The groundwater aquifer in Edgar Canyon is limited and storage is small; however considerably more water can be pumped during wet years than dry years, and BCVWD prefers to use these wells because they are the least expensive to operate and distribution is by gravity that does not require additional pumping energy. (UWMP, p. 6-18) This groundwater supply is not adjudicated; however, BCVWD assumes in the 2015 and 2020 UWMPs a safe yield of 2,200 AFY based on the results of studies prepared by the San Timoteo Watershed Management Authority[3] and San Gorgonio Pass Water Agency.[4]

Beaumont Basin wells provide the remaining 90% of the District's potable water supply. The total pumping capacity of BCVWD wells in this basin is 17,425 gpm, assuming 24-hour operation. With the largest well out of service, 24-hour capacity is 13,425 gpm (19.3 mgd); however, District wells do not typically operate from 4 PM to 9PM so the pumping rate for a 19-hour day is 19.9 mgd (or 15.3 mgd with the largest well out of service)

[2] This project is still early in the planning process; however, the District's Board of Directors has authorized a participation level of 4,000 AFY of supply in conjunction with the SGPWA's participation level of 10,000 AFY (BCVWD(e), p. 2).
[3] Wildermuth Environmental, Inc. (WEI, 2005). *Integrated Regional Water Management Program for the San Timoteo Watershed, Final Draft,* prepared for the San Timoteo Watershed Management Authority, June 2005. The authority was dissolved around 2011.
[4] San Gorgonio Pass Water Agency (Hahn, 2010). *Report on the Sustainability of the Beaumont Basin and Beaumont Management Zone,* prepared for the SGPWA by Hahn Water Resources, LLC, Evergreen, CO, November.

(UWMP, p. 6-32). Beaumont Basin wells are large-capacity and pump from deep aquifers (e.g., 1500 feet below ground surface [bgs]) (UWMP, p. 3-25). As described in further detail in Section 4 – Groundwater Analysis, the Beaumont Basin is adjudicated. It covers 27 square miles with at least 1.1 million acre-feet of water in storage and about 200,000 to 400,000 acre-feet of unused groundwater storage capacity (UWMP, p. 6-18). Since the adjudication in 2004, groundwater levels in the Beaumont Basin have stabilized (UWMP, p. 6-26). The safe yield for this basin is currently 6,700 AFY. As of CY 2020, BCVWD had 39,750 AF in storage in the Beaumont Basin and BCVWD can store up to 80,000 AF (BBW(a), Figure 3-5).

In CY 2020, BCVWD pumped 14,183 AF (UWMP, p. 6-30). BCVWD's existing maximum pumping capacity is approximately 27.3 mgd (or 30,580 AFY). The recorded extractions from District wells between 2016 and 2020 are shown in **Table 3-4.**

Table 3-4 Recorded Groundwater Production, 2016-2020 (AFY)

Supply	2016	2017	2018	2019	2020
District wells in Edgar Canyon	1,493	1,271	1,436	1,308	1,279
District wells in Beaumont Basin	9,123	10,183	12,329	11,202	12,904
Total	10,616	11,454	13,765	12,510	14,183

Note: AFY = acre feet per year
From BCVWD 2020 UWMP, p. 6-30 (Appendix A).

BCVWD plans to maximize local water supplies and minimize the need for imported water from other regions (UWMP, p. 6-2). A thorough description of the District's groundwater rights pursuant to SB 610 guidance is provided in Section 4 – Groundwater Analysis.

Surface Water

BCVWD does not use local surface water directly but does have two active surface water diversions in Edgar Canyon, which are on file with the State of California Division of Water Rights. Copies of said diversion permits are located in Appendix F. These diversions direct flows to percolation ponds in Edgar Canyon to recharge the shallow aquifers for wells in the upper and middle Edgar Canyon. BCVWD has been doing this since the late 1800's and has a pre-1914 appropriative water right to divert up to 3,000 miner's inches (MIH) or approximately 43,440 AFY for domestic and irrigation uses. However, the District has never required such a large quantity of water and the watersheds may not be capable of supplying such quantities in an average year. Further, the District does not include the diversion right in water supply calculations. (UWMP, pp. 6-34, 6-35)

BCVWD retains the right to capture the occasional very high flood flows that are captured in basins located at the mouth of Edgar Canyon. During those times, SGPWA would be precluded from percolating imported water there and instead use other SGPWA facilities. (UWMP, p. 6-35)

Stormwater

BCVWD is pursuing and quantifying supplies from other stormwater capture projects in addition to the Edgar Canyon basins noted above. This includes the Starlight, Eighth Street, and Cherry Basins located in the Sundance Development (completed and functioning) and the Beaumont MDP Line 16 project (aka Recharge Basin Feeder), which will be under construction by Riverside County Flood Control District in 2021-2022. BCVWD estimates approximately 730 AFY of "new water" may result from these projects (UWMP, p. 6-39). "New water" is water which is developed over and above what would have occurred naturally, in an undeveloped condition (UWMP, p. 6-39). The amount of new water potentially credited to BCVWD would be determined by the Watermaster. Refer to Appendix G for plans related to the forthcoming Beaumont MDP Line 16 project.

BCVWD has also identified three conceptual storm water capture projects in the 2020 UWMP (i.e., Edgar Canyon, Noble Creek, and Marshall Creek) with an estimated yield of 1,050 AFY (p. 6-36).

Recycled Water and Non-Potable Water

Currently, BCVWD does not produce or distribute recycled water. The City of Beaumont's Wastewater Treatment Plant is located within BCVWD's service area and has been recently upgraded and expanded to include the ability to produce recycled water for distribution. BCVWD and the City of Beaumont entered into a Memorandum of Understanding (MOU) on July 10, 2019, which defined the general terms, roles, and responsibilities of both agencies as they related to the delivery of recycled water from the City's upgraded and expanded treatment facility to BCVWD (a copy of the MOU is located in Appendix H). Efforts are currently underway by both agencies to develop an agreement to set the specific terms and responsibilities. Studies and plans have been completed for a recycled water transfer pumping station. (UWMP, p. 6-40)

The volume of wastewater collected from BCVWD's service area in 2020 was 4,032 AF; because approximately 2,020 AFY (1.8 mgd) must be discharged by the City's treatment plant to Cooper's Creek to meet certain environmental habitat mitigation requirements, the remaining 2,012 AFY would hypothetically be available for recycled water use by BCVWD (UWMP, p. 6-46). Projected future recycled water supplies available to the District are in **Table 3-5**.

BCVWD has an extensive network of more than 40 miles of non-potable water transmission pipelines already built that can convey untreated imported water, groundwater, and recycled water. In addition, there is a network of smaller distribution mains, a 2 MG non-potable water reservoir, and about 300 existing landscape connections to the non-potable system receiving 1,620 AF of water (CY 2020). The non-potable system is pressurized currently with groundwater from Well 26. This is supplemented with potable water during periods of high demand. (UWMP, p. 6-40)

Table 3-5 Projected Future Recycled Water Supply (AFY)

	2020	2025	2030	2035	2040	2045
Estimated amount which can distributed (AFY)[(a)]	1,630	2,017	2,381	2,892	2,955	2,915

Note: AFY = acre feet per year

Source: From BCVWD 2020 UWMP, p. 6-44 (Appendix A), which notes that this data is from a draft BCVWD Non-Potable Master Plan that is in-progress.

(a) Accounts for a 10% loss between the wastewater influent and recycled water produced by the treatment plant, as well as an effluent discharge commitment by the treatment plant of 1.8 MGD to Cooper's Creek.

3.4 Documenting Normal Year Water Supply and Demand

BCVWD estimates in its 2020 UWMP that customer water demand and available water supply from 2025 to 2045 are at least equal during "normal" precipitation years and there will be water available for banking in the Beaumont Basin (p. 7-13). This is consistent with what occurred in 2020; supply met demand with 427 AF going to banked groundwater storage (UWMP, p. 6-58).

A summary from the 2020 UWMP of the normal year water supplies projected to be available to BCVWD, as well as the normal year water demand projections are compared in **Table 3-6**.

Table 3-6 BCVWD Projected Normal Year Supply and Demand (AFY)

	2025	2030	2035	2040	2045
Supply	18,565	18,478	23,175	24,738	26,270
Demand	16,929	17,873	18,869	19,846	20,660
To Beaumont Basin Storage[(a)]	1,636	605	4,306	4,892	5,610

Note: AFY = acre feet per year

Source: BCVWD 2020 UWMP, p. 7-13. (Appendix A).

(a) Positive difference indicates amount banked in Beaumont Basin storage account.

As shown in Table 3-6, BCVWD has estimated that sufficient supply will be available during any normal year occurring between 2020 and 2040.

3.5 Documenting Single Dry Year Water Supply and Demand

The following assumptions are made in BCVWD's 2020 UWMP to estimate future water supplies and demands during a single dry year (p. 7-5):

- A single-dry year for BCVWD corresponds to the conditions observed in 1991, which is when the minimum amount was extracted from Edgar Canyon groundwater, which was 1,117 AF (p. 7-8).
- A reduction of 15% is assumed for average annual forbearance water and reallocated unused Overlying Party rights (i.e., water used for replenishment of Beaumont Basin account) will be available in a dry year (i.e., 85% of normal). (UWMP, p. 7-8)
- Future return flow credits were not reduced by 15% for a single-dry year.
- A reduction of 15% is assumed for recycled forbearance water due to a potential reduction in treated wastewater due to water conservation (i.e., 85% of normal). (UWMP, p. 7-8)
- 5% of Table A water will be available to SGPWA for BCVWD's estimated available imported water supplies.
- 90% of the expected normal, average recycled water will be available (UWMP, p. 7-11).
- 36% of average rainfall will be available as new water from stormwater capture projects (UWMP, p. 7-12).
- No reduction in water demand was assumed (UWMP, p. 7-15).

BCVWD has determined with these assumptions that sufficient water supplies will be available during a single dry year occurring anytime from 2025 to 2045, as shown in **Table 3-7**.

Table 3-7 BCVWD Projected Single Dry Year Supply and Demand (AFY)

	2025	2030	2035	2040	2045
Supply	7,349	7,878	8,944	9,195	9,792
Demand	15,429	16,673	18,097	19,124	19,988
From Banked Beaumont Basin Storage[(a)]	(8,080)	(8,795)	(9,153)	(9,929)	(10,196)

Note: AFY = acre feet per year
Source: BCVWD 2020 UWMP, p. 7-16 (Appendix A).
(a) A negative difference indicates the amount of water banked in the Beaumont Basin storage account that would be needed to meet demands.

3.6 Documenting Multiple Dry Year Supply and Demand

BCVWD has made the following assumptions in its UWMP to estimate future water supplies and demands during a multiple (five-consecutive) year drought (UWMP, p. 7-22):

- A five-dry year period for BCVWD corresponds to the conditions observed from 1988 to 1992.
- The average amount available from Edgar Canyon groundwater for 5 consecutive dry years is 1,305 AF (p. 7-9).
- 85% of average annual forbearance water and reallocated unused Overlying Party rights (i.e., water used for replenishment of Beaumont Basin account) will be available in a dry year (a reduction of 15%). (UWMP, p. 7-8)
- Future return flow credits were not reduced by 15% for a dry year.
- 85% of recycled forbearance water will be available for a potential reduction in treated wastewater due to water conservation (a 15% reduction). (UWMP, p. 7-8)
- 24% of Table A water will be available to SGPWA for BCVWD's estimated available imported water supplies.

- 85% of the expected normal, average recycled water will be available (UWMP, p. 7-11).
- 61% of average rainfall will be available as new water from stormwater capture projects (UWMP, p. 7-12).
- Total water demand will be reduced 30%.

BCVWD has projected based on the assumptions above that sufficient water supplies will be available with the use of banked groundwater supplies during each year of a five-year drought that could occur anytime from 2025 to 2045, as shown in **Table 3-8.**

Table 3-8 BCVWD Projected Multiple Dry Year Supply and Demand (AFY)

		2025	2030	2035	2040	2045
Five Consecutive Dry Years	Supply	10,639	10,697	11,456	11,331	11,642
	Demand	10,800	11,671	12,668	13,387	13,992
	From Banked Beaumont Basin Storage[(a)]	(162)	(974)	(1,212)	(2,056)	(2,350)

Note: AFY = acre-feet per year
Source: BCVWD 2020 UWMP, p. 7-20 (Appendix A).
(a) A negative difference indicates the amount of water banked in the Beaumont Basin storage account that would be needed to meet demands.

3.7 Comparison of Available Water Supply and Demand

CWC section 10910 (c)(3) states: *If the projected water demand associated with the proposed project was not accounted for in the most recently adopted UWMP…the water 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.*

BCVWD projected in the 2020 UWMP that water would be needed from the Beaumont Basin storage account to meet projected dry year demands in all drought year scenarios ranging from a single-dry year to a six-consecutive dry year period (UWMP, p. 7-21). BCVWD also projected banking around 28,500 AF of water in the Beaumont Basin over the next 25 years, which would bring the storage account to about 68,250 AF and would be enough to meet year 2045 demands for more than 3.5 years without imported water deliveries (UWMP, p. 7-4).

SGPWA determined in its 2020 UWMP that supplies would meet retailer's demands during drought years assuming retailers use stored water and regionally managed supplies to offset fluctuations in imported water supplies (SGPWA, p. ES-4). BCVWD's projected amounts of stored water that would be needed to meet projected demands would be greater if conservation measures and other restrictions are ineffective. Thus, the importance of maintaining a substantial amount in storage and having effective demand reduction measures cannot be understated. BCVWD Resolution No. 2014-05 states the various conditions under which BCVWD shall not issue a will-serve letter (aka Availability Letter) to new developments including when "the quantity of the District's ready to deliver water supplies is less than a projected demand of five years based on the District's then current annual demand" (a copy of BCVWD Resolution No. 2014-05 is located in Appendix I). The results of the District's 2020 Drought Risk Assessment suggest about 12,000 AF should be kept in the Beaumont Basin storage account to maintain a five-year supply at the ready (UWMP, p. 7-21). If no conservation occurs during a dry period, then BCVWD will need to maintain about 52,000 AF in the storage account to meet the demands during a five-consecutive dry year period (UWMP, pp. 7-21, 7-22). Currently, BCVWD has 39,750 AF stored in the Beaumont Basin storage account (UWMP, p. 6-26).

This Page Intentionally Left Blank.

SECTION 4 - GROUNDWATER ANALYSIS

SB 610 requires specific groundwater information to be included in the WSA if groundwater will be a source of water for the proposed project. As discussed in Section 3, groundwater is the source of supply for BCVWD and therefore part of the water supply for the proposed Project.

Law

CWC 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 description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as over drafted or has projected that the basin will become over drafted 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 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.

4.1 Review of Urban Water Management Plan (CWC Section 10910(f)(1))

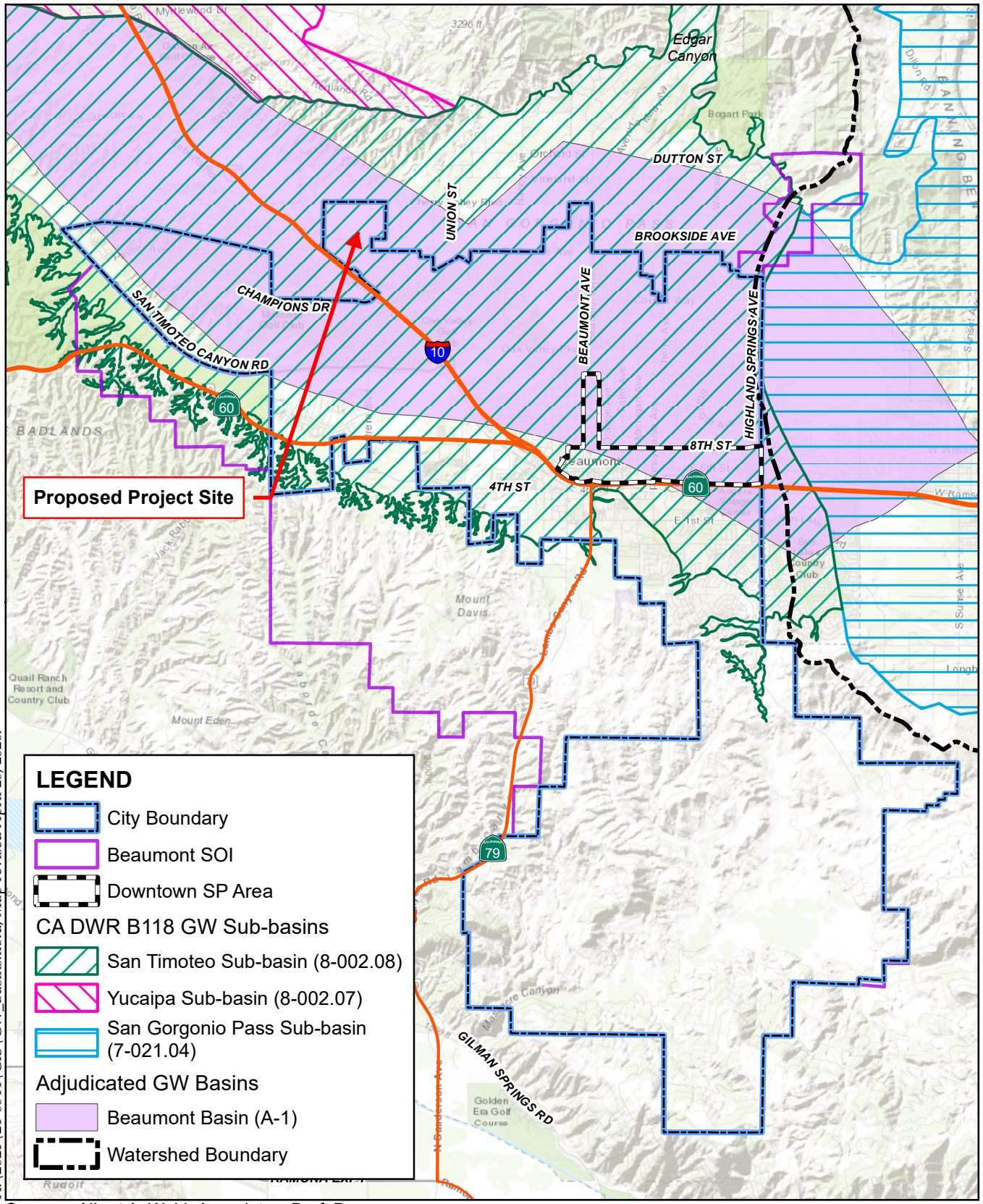
BCVWD's 2020 UWMP, prepared by BCVWD staff was adopted by BCVWD Resolution No. 2021-13 on August 26, 2021 (located in Appendix A). The UWMP includes information relevant to the identified water supply for the proposed Project and is incorporated herein. Relevant information includes: 1) current and projected water demands through year 2045; 2) a description of the groundwater basins; 3) the reliability of the water supply, projected supply and demand comparisons, and water shortage plans; and 4) demand management efforts.

The 2020 UWMP contains a description of known development projects that are under construction or planned for construction in the District's service area, including the estimated number of EDUs per project. The EDUs were used to perform the water demand projections in the UWMP and determine whether the proposed Project was accounted for in the UWMP.

4.2 Groundwater Basin Descriptions (CWC Section 10910(f)(2))

The District produces water from two groundwater sources: Beaumont Basin and Edgar Canyon (**Figure 4-1 – Beaumont Basin**). The Beaumont Basin is an adjudicated basin and the primary source of water supplies for BCVWD. Edgar Canyon is not within an adjudicated basin.

Remainder of Page Intentionally Left Blank



H:\2021\21-0044\GIS\GW_Basins.mxd; Map revised April 20, 2020.

Sources: Albert A. Webb Associates, Draft Program Environmental Impact Report for Beaumont General Plan" September 8, 2020.

0 1 2 3 Miles

Figure 4-1 – Groundwater Basins

Beaumont Summit Station

ALBERT A. WEBB ASSOCIATES

Beaumont Basin Description

BCVWD has 11 wells in the Beaumont Basin. According to California Department of Water Resources Bulletin 118, the Beaumont Basin is located partially within the San Timoteo Subbasin (No. 8-002-08) and San Gorgonio Pass Subbasin (No. 7-021.04). The following basin description is from the BCVWD 2020 UWMP (p. 6-18):

> *"The Beaumont Basin, or Beaumont Storage Unit (BSU) as it is also known, is one of the largest groundwater units in the San Gorgonio Pass area covering an area of about 27 sq. mi. with at least 1.1 million acre-feet of water in storage and about 200,000 to 400,000 acre-feet of unused groundwater storage capacity. The San Timoteo Watershed Management Authority (STWMA) estimated the amount of water in the Beaumont Basin could be as much as 2.4 million acre-ft based on usable groundwater extending down to 1,500 ft below ground surface (bgs).[1] This is 500 ft deeper than previously assumed and is based on several wells drilled by BCVWD and others.*
>
> *The boundaries of the BSU are defined on all sides by postulated faults including the Banning and Cherry Valley Faults to the north and unnamed faults to the south, east, and west. The Cherry Valley Fault is the dividing line between the BSU and the Singleton storage unit.*
>
> *Groundwater within the BSU primarily occurs in the older alluvium and the San Timoteo Formation. Groundwater elevations in the BSU range from approximately 160 ft bgs to 600 ft bgs. Underlying the BSU are nearly impermeable granitic/metamorphic basement rocks.*
>
> *Since startup of the BCVWD recharge facility and the recharge of SPW, groundwater in the BSU flows from the recharge site (at Beaumont and*

[1] "Integrated Regional Water Management Program for the San Timoteo Watershed," Final Draft, prepared for the San Timoteo Watershed Management Authority, Wildermuth Environmental, Inc. (WEI), p 2-15, June 2005.

Brookside Avenues) in a southeasterly direction toward Banning and a southwesterly direction to San Timoteo Creek."

Prior to the Adjudication in 2004, progressive drawdown of water levels in the Beaumont Basin occurred from the 1920s. Since the Adjudication, groundwater levels have stabilized, albeit at elevations 75 to 120 feet below the 1920 levels and about 10 to 40 feet below the 1980 level. "However, in spite of the drop in water levels, there were no water quality impacts or known subsidence. At the present time, with the Adjudication, the Beaumont Basin is operated on a long-term safe yield basis without further overdraft" (UWMP, p. 6-26).

Legal Right to Pump from the Beaumont Basin

The following description of groundwater management is from the BCVWD 2020 UWMP (pp. 6-23 - 6-25):

"The Beaumont Basin was adjudicated in February 2004, in Superior Court, Riverside County, Case RIC 389197, San Timoteo Watershed Management Authority vs. City of Banning et al (Adjudication or Judgment). The Judgment established the Beaumont Basin Watermaster (Watermaster) to administer the Judgment. It established the rights of the Overlying Parties and the Appropriator Parties, e.g., BCVWD and others. Some of the essential elements of the Judgment are as follows:

- *The "Safe Yield" of the Basin was established at 8,650 AFY. This was to be reevaluated every 10 years. §I 3.X and §VI 5.Y. It was re-evaluated in 2013 -2015 and on April 2015, through Resolution 2015-01, the safe yield was reduced to 6,700 AFY.*
- *A controlled overdraft of the basin was allowed for the first ten years to create more usable storage capacity in the Basin for Conjunctive Use. In the Judgment, this was termed "Temporary Surplus." This was established at 160,000 acre-ft.*

- *After ten years (February 2014), the controlled overdraft ceased. This provided a ten-year time frame for the appropriators to develop facilities to use or bank imported SPW and develop other water sources. § I3.BB and Exhibit C, Column (5).*
- *The Overlying Parties can extract, in total, a maximum of 8,650 acre-ft/yr, which was reduced to 6,700 AF in the safe yield adjustment of 2015. (All of the initial safe yield was dedicated to the Overlying Parties.) The Overlying Parties and their rights are shown in column (4) of Exhibit B. If an Overlying Party pumps more than five times its share of the operating safe yield (as shown in column (4) of Exhibit B) in any five consecutive year period, the overlying producer shall provide Watermaster with sufficient funds to replace the overproduction (typically with imported water). Exhibit B, Column (4) and §II 1.A*
- *An Overlying Party can request water service from an Appropriator Party. For example, an Overlying Party can subdivide its property and then request an Appropriator, such as BCVWD, to supply the new subdivision with water. When this happens, the Overlying must forgo extracting that volume of water provided by the Appropriating Party and the Appropriating Party shall have the right to produce the equivalent volume of water which the Overlying Party did not pump. §III 3. (This is sometimes called "forbearance" water.)*
- *If an Appropriating Party serves recycled water to an Overlying Party, the Overlying Party's water right is not diminished, but the Appropriator Party shall have the right to use that portion of the Overlying Water Right offset by the recycled water. In other words, serving recycled water to an Overlying Party allows the Appropriator to pump the equivalent amount of groundwater. §III 3 E.*
- *There is a provision which requires the BCVWD to set aside 2,400 AFY of projected water demand in the 2005 Urban Water*

Management Plan update specifically for Oak Valley Partners, LP. For the 2010 UWMP update, the Judgment states this figure should be revised to reflect the projected water demands. Oak Valley Partners, LP has an overlying pumping right per column (4) of Exhibit B equal to 1,806 AFY. However, it is unclear how this 1,806 AFY is to split between YVWD and BCVWD. BCVWD started to provide potable water service to Oak Valley Partners, LP land in 2005; in 2010, BCVWD provided a total of 1,307 acre-ft to them. BCVWD continues to provide water to the land from its potable and non-potable water distribution system §III.3.G.

- *If any Overlying Party produces less than five times the share of the safe yield assigned to the Overlying Party during any 5 year period (per Column (4) of Exhibit B), the unused portion shall be apportioned to the Appropriator Parties per Column (2) of Exhibit C: BCVWD 42.51%, Yucaipa Valley Water District 13.58%, South Mesa Water Company 12.48%, and the City of Banning 31.43%. (Watermaster Rules and Regulations §7.3.)*
- *Any Appropriator may transfer all or any portion of its Appropriator's Production Right or Operating Yield that is surplus to its needs to another Appropriator. (Watermaster Rules and Regulations §7.2.)*
- *Watermaster has the authority to enter into Groundwater Storage Agreements with producers for the storage of supplemental water, wellhead protection and recharge, well abandonment, well construction, monitoring, replenishment, mitigation of overdraft, and collection of assessments. §VI.5.*
- *Supplemental replenishment water can be recycled water, State Project Water, or other imported water. Replenishment can be accomplished by spreading and percolation, injection, or directly using treated surface water or raw or treated imported water. §VI 7.*

- *A minimum 200,000 acre-ft of groundwater storage capacity shall be reserved for conjunctive use. Any person, party or not a party to the Judgment, can make reasonable beneficial use of the groundwater storage capacity for storage of supplemental water provided that it is in accordance with a storage agreement with Watermaster. §I.3.S and §V.5.B*
- *Minimal producers (10 or less acre-ft/yr) are exempt from the Adjudication. §III.4.and §I.3.K*

Watermaster is responsible for providing the legal and practical means of ensuring the waters of the Beaumont Basin are put to maximum beneficial use and include:

- *Administer the Judgement; approve Producer activities;*
- *Maintain and improve water supply; maintain and improve water quality; monitor and understand the Basin; and*
- *Develop and administer a well policy; develop contracts for beneficial programs and services; provide cooperative leadership.*

To simplify the Judgement, an appropriator, like BCVWD, after February 2014, can only extract water within the appropriator's storage account as determined by Watermaster. Water in the storage account can include:

- *Imported water recharged by the Appropriator.*
- *Water transferred from one Appropriator's storage account to the Appropriator.*
- *Recycled water recharged to the Beaumont Basin which meets Regional Board and SWRCB Division of Drinking Water groundwater water recharge regulations.*
- *"New" captured storm water or urban runoff recharged by the Appropriator.*

- *Unused Overlying Party pumping rights allocated back to the Appropriator.*
- *Return flows from imported water or recycled water applied to land overlying the Beaumont Basin by the Appropriator.*
- *Forbearance water allocated to the Appropriator for providing potable or recycled water to the Overlying Party's land.*

Watermaster performs an annual accounting of these sources and produces an annual report identifying the water in storage for each appropriator.

According to Watermaster, BCVWD had 39,750 acre-ft in storage in the Beaumont Basin at the end of 2020. BCVWD's storage account has a maximum capacity of 80,000 acre-ft."

Edgar Canyon Description

BCVWD has 13 wells in Edgar Canyon, which is located within the San Timoteo Subbasin (No, 8-002-08) but outside of the adjudication limits of the Beaumont Basin. The following description is from the BCVWD 2020 UWMP (pp. 6-17 - 6-18):

"Well No. 13 is a standby for Well No. 12; Well No. 9A has limited use and Well RR-1 is in the process of being refurbished. Total capacity of the wells, not including RR-1, 9A and 12 is 1,510 gpm or 2.17 mgd. Individual well capacities range from 50 gpm to 300 gpm. Well capacities in Edgar Canyon vary from year to year throughout any given year depending on hydrologic conditions, i.e., wet year vs dry year.

Groundwater in Edgar Canyon primarily occurs in the shallower, younger and older alluvial valleys and within the rock fractures beneath the alluvium. Numerous faults cross the canyon generally in a southeast-northwest direction. These act as barriers to groundwater movement and subdivide

the canyon into several sub basins. Over the years, BCVWD has drilled numerous wells, pilot holes and test wells in Edgar Canyon; but, because of the faulting, many of these wells have proven to be of limited use or value. Many "dry holes" are noted on some of the old BCVWD system maps.

The groundwater aquifer in Edgar Canyon is limited and storage is small. Groundwater levels vary from just a few feet bgs to about 200 feet bgs. The groundwater levels and groundwater production respond quickly to stream flow. During wet years, considerably more water can be pumped than during dry years.

BCVWD prefers to use the wells in Edgar Canyon since they are the least expensive to operate and the water can be conveyed to the District customers by gravity with no additional pumping. The wells in Edgar Canyon currently provide about 10% of the District's potable water supply. The District has arbitrarily subdivided Edgar Canyon into three production areas:

- *Upper Edgar Canyon -- in San Bernardino County from the District's northern boundary, where Oak Glen Road crosses over Little San Gorgonio Creek, to a point about the center of Section 2, T1S/R1W approximately 1.5 miles north of the Riverside/San Bernardino County Line. The Upper Canyon wells include all wells except Wells 6, 4A, 5 and RR-1.*
- *Middle Edgar Canyon -- in San Bernardino County from the Riverside/San Bernardino County Line to a point about 0.5 mile north of the County line. Well 6 is in the Middle Edgar Canyon.*
- *Lower Edgar Canyon -- in Riverside County from the mouth of the Canyon at Orchard St. to about 1 mile north (upstream) where Well No. 5 is located. Well No. 4A is located about 1/4 mile below Well*

No. 5. Well RR-1 is about ½ mile north of Orchard St., downstream of Well 4A."

Legal Right to Pump from Edgar Canyon

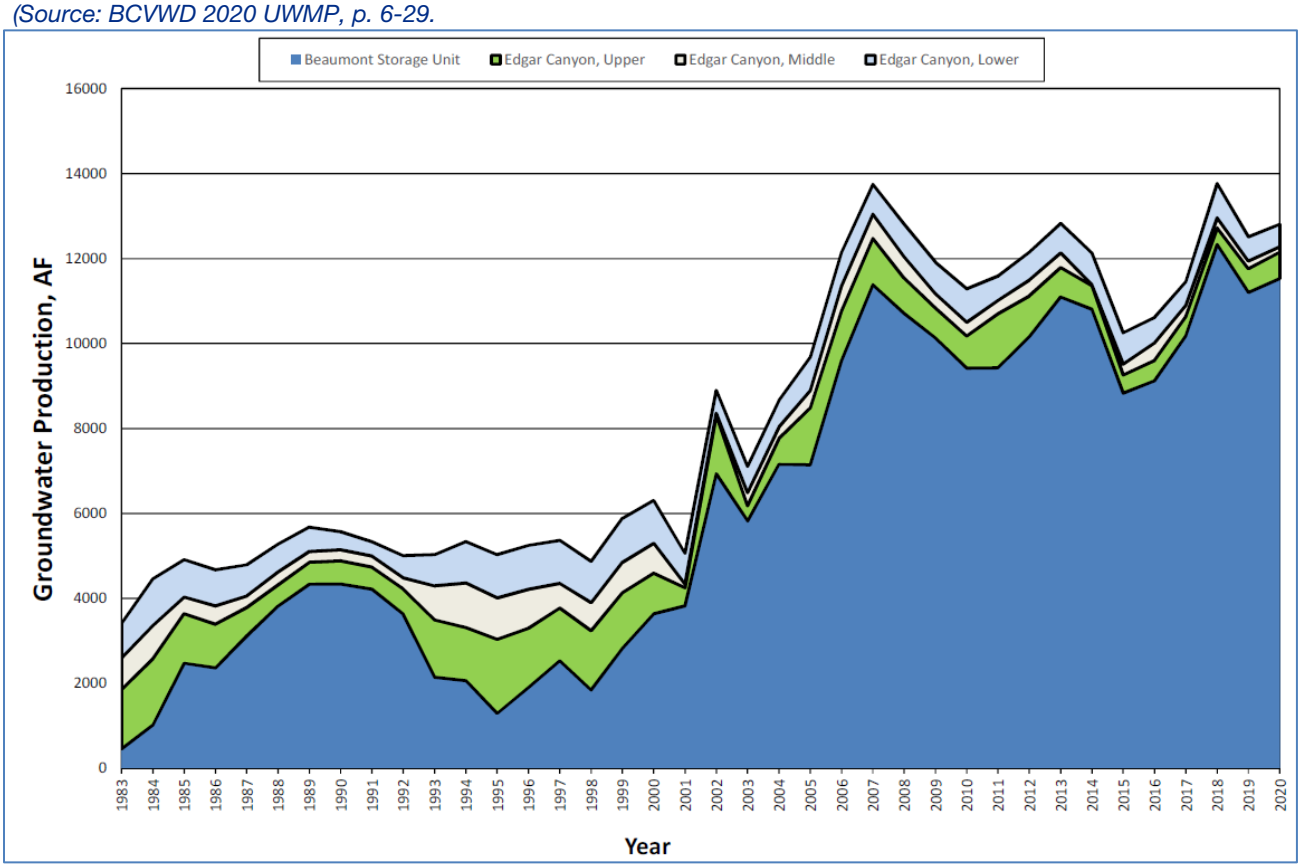
BCVWD has been extracting groundwater from Edgar Canyon for nearly 100 years. Surface water in Little San Gorgonio Creek (Edgar Canyon) is diverted into a series of percolation ponds in Edgar Canyon, which then recharge the shallow aquifers to help supply the existing wells in Upper and Middle Edgar Canyon. The surface water diversion permits are located Appendix F. BCVWD has been doing this since the late 1800s and has a pre-1914 appropriative water right to divert up to 3,000 miner's inches (MIH) or approximately 43,440 AFY for domestic and irrigation uses.[2] However, BCVWD has never had a demand that requires such large quantities of water supply; and the watersheds may not be capable of supplying such quantities during an average year. The diversion right is not included in BCVWD's water supply calculations but is needed to ensure adequate supply from the Edgar Canyon wells. (UWMP, pp. 6-33, 6-34)

4.3. Recorded Use of Groundwater (CWC Section 10910 (f)(3))

BCVWD's groundwater supply currently comes from up to 24 groundwater wells located throughout the service area within the Beaumont Basin and Edgar Canyon. As of CY 2020, BCVWD produced 14,183 AF from the basins (UWMP, p. 6-30). BCVWD's groundwater production history from 1983 to 2020 from the 2020 UWMP is shown in **Chart 4-1.**

[2] One Southern California Miners Inch = 0.02 cubic feet per second (cfs).

Chart 4-1 - BCVWD Groundwater Production History Since 1983 (AF)
(Source: BCVWD 2020 UWMP, p. 6-29.



BCVWD has long-term records on pumping. From 1957 to 2020, the average production from the Edgar Canyon Wells is 1,881 AFY. With the addition of a transmission main in 1983, average production since 1983 to 2020 is 2,073 AFY. “This is far more indicative of Edgar Canyon’s ability to produce water” (UWMP, p. 6-29). Minimum yield is 1,117 AFY, which is about 54% of the average yield (p. 6-31). A 2005 study prepared for the San Timoteo Watershed Management Authority (now dissolved) indicated a safe yield for Edgar Canyon of about 2,600 AFY (WEI, 2005); however, a separate 2010 study by SGPWA estimated the safe yield between 2,000 and 2,800 AFY (Hahn, 2010) (UWMP, p. 6-26). The District has assumed a safe yield of 2,200 AFY in the 2015 and 2020 UWMPs.

Table 3-4 in Section 3 provides BCVWD’s pumping from the Beaumont Basin for 2016-2020. The water pumped includes imported water recharged and extracted the same

year. Water that was recharged and not extracted the same year went into the BCVWD's storage account.

4.4. Projected Use of Groundwater (CWC Section 10910(f)(4))

The proposed Project will receive water from local groundwater sources, some of which is supplemented with imported recharged water and diverted surface water. Specifically, Well 29 is expected to be the primary source of water for the Project site. Well 29 is located on the Project site and produces from the Beaumont Basin.

Table 4-1 summarizes the projected amount of extractable groundwater from the Beaumont Basin, which does not include stored water, recharged imported water, or captured stormwater.

Table 4-1 Summary of BCVWD Extractable Groundwater From Beaumont Basin

	2025	2030	2035	2040	2045
BCVWD's Share of Reallocated Unused Overlier Pumping Rights (AFY)[(a)]	1,322	1,285	1,165	1,099	1,099
Potable Forbearance Water (AFY)	0	67	263	384	384
Non-Potable Forbearance Water (AFY)[(b)]	471	479	523	557	557
Return Flow Credits above Baseline (AFY)	280	514	868	922	1,155
Total (AFY)	**2,073**	**2,346**	**2,820**	**2,963**	**3,196**

AFY = acre-feet per year

Source: BCVWD 2020 UWMP, p. 6-33. A detailed analysis is provided in BCVWD's 2016 Potable Water Master Plan.

(a) Includes proportionate reduction in the reallocation of unused Overlying Party pumping rights to account for the reduction in Basin Safe Yield from 8,650 to 6,700 AFY.

(b) Does not include non-potable (recycled) water planned to be supplied to Tukwet Canyon and Oak Valley Golf Courses since this is not currently occurring.

Explanations of reallocated overlier pumping rights, forbearance water, and return flows are provided below (UWMP, p. 4-2):

- **Reallocation of Overlier Pumping Rights.** The Judgment allows the amount of groundwater not produced by an overlying party to be available for allocation to

appropriators in accordance with their percentage shares of unused safe yield stated in the Adjudication Exhibit C3. BCVWD's share is 42.51% of the unused overlier pumping rights. The Beaumont Basin Watermaster administers this reallocation and transfers the appropriate amounts into the appropriators' storage accounts on an annual basis.

- **Forbearance Water.** The Judgment stipulates that when an appropriator, such as BCVWD, provides potable or non-potable (e.g., recycled) water service to an overlying party or their successors in interest, such as would occur if the overlying party developed the parcel, the equivalent volume of water provided to the overlier shall be earmarked by the appropriator providing the water. The overlying party shall forbear the use of that volume of water earmarked by the appropriator. The appropriator, then, has the right to pump the volume of water forgone by the overlier. This is done through the Beaumont Basin Watermaster who transfers forgone water to the appropriator's groundwater storage account on an annual basis.
- **Return Flow Credits.** The Judgment allows the Watermaster to credit appropriators for the amount of imported water and recycled water that is applied to land overlying the Beaumont Basin. The methodology for assigning credits is under-development by the Watermaster.

Projected use of groundwater in the Edgar Canyon area by BCVWD is 2,070 AFY beginning in 2025 to 2045 (UWMP, p. 6-59).

4.5. Sufficiency of the Groundwater Basin (CWC Section 10910(f)(5))

An adjudicated water right has perhaps the most substantial indicia of reliability of any water right that currently exists in California. An adjudicated right is based upon long-term studies whose purpose it is to protect the long-term functionality of the water source. These rights are coordinated in an established and binding manner with all the other users of the Beaumont Basin and are overseen by the Watermaster which has the

authority to mandate and proscribe activities whose purpose is to protect the water source and maximize its long-term beneficial use.

All Watermaster processes are governed by Rules and Regulations and receive active oversight from the Court which, as noted above, retains continuing jurisdiction over the administration of the Judgment. Consequently, the sufficiency of the groundwater is not only directed by rigorous Watermaster management processes but validated and ensured by continuing Court oversight.

The sufficiency of the vast majority of the groundwater supply that is available to BCVWD is assured by SGPWA Resolution No. 2015-05, which established an obligation to meet the future water supply needs of the region, including BCVWD (UWMP, p. 7-10). BCVWD's water supply projects described in Section 3 would expand local water supplies – both potable and non-potable – and increase the volume of local water recharged into the Beaumont Basin will also contribute to ongoing sustainability. Finally, the use of mandatory conservation measures and other restrictions as described in the 2020 UWMP (e.g., Water Shortage Contingency Plan in Chapter 8 and Demand Management Measures in Chapter 9 of the UWMP) will also conserve supplies.

California Water Code section 10631(j) provides that urban water suppliers that rely upon a wholesale agency for a source of water, such as SGPWA, may rely upon water supply information provided by the wholesale agency in fulfilling UWMP informational requirements.

SGPWA is a State Water Project Contractor with a Table A contract for 17,300 AFY. SGPWA has also reviewed in its 2020 UWMP the sufficiency of supplies for its service territory that includes the BCVWD service area and determined that imported water will be available and sufficient to meet the projected demands of BCVWD.

SGPWA's independent analysis of contemporary regional water conditions provide additional and reliable assurances concerning the sufficiency of imported water supplies

that comprise roughly half of BCVWD's projected future total supply especially during drought conditions.

In conclusion, the sufficiency of groundwater supplies available to BCVWD is assured because of the BCVWD projects to expand local supplies and programs to curb consumption, SGPWA projects to expand its water supply, and the Beaumont Basin Watermaster oversight conducted under the auspices of continuing Court jurisdiction that specifically direct and assure the long-term production of water pursuant to the District's legal rights to produce such water necessary to meet ultimate water demands.

Remainder of Page Intentionally Left Blank

SECTION 5 - PRIMARY ISSUE FOR ASSESSMENT

The lead agency for a proposed project "…shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy demands of the project, in addition to existing and planned future uses" (CWC section 10911). The lead agency is expected to approve or disapprove the project based on several factors, including but not limited to the WSA.

Law

CWC Section 10910(g)(1)

> *Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.*
>
> CWC Section 10911(b): *The city or county shall include the water assessment provided pursuant to Section 10910, and any information provided pursuant to subdivision 9a), in any environmental document prepared for the project pursuant to Division 13 (commencing with Section 21000) of the Public Resources Code.*
>
> *(c) The city or county may include in any environmental document an evaluation of any information included in that environmental document provided pursuant to subdivision (b). The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses. If the city or county determines that water supplies will not be sufficient, the city or county shall include that determination in its findings for the project.*

The lead agency is expected to review the WSA and decide whether additional water supply information is needed for its consideration of the proposed Project.

5.1 Findings

Whereas:

1. The Beaumont-Cherry Valley Water District (BCVWD) has been identified as the water supplier for the proposed *Beaumont Summit Station Specific Plan* (Project). The City of Beaumont is the land use authority and lead agency for the Project.
2. The Project site is currently approved for a residential development with up to 560 dwelling units per the 2007 Sunny-Cal Specific Plan. BCVWD previously estimated a water demand of 531 AFY for said dwelling units.
3. The Project modifies the previously approved land use plan to construct a non-residential business park with three warehouses and a commercial parcel with potential retail and restaurant uses. The water demand for the Project is estimated at 114 AFY of potable water and 69 AFY of outdoor non-potable water, based on unit water demand factors used recently for similar projects in the BCVWD service area. The potable water demand is equivalent to 210 EDUs.
4. The BCVWD 2020 Urban Water Management Plan (UWMP) projected future water demands assuming 529 EDUs on the Project site and found that there were sufficient supplies in a normal and the various dry years. Since the Project's water demand is less than that used in the UWMP, it can be concluded that the water demand of the Project as currently configured was accounted for in the most recent UWMP and will have adequate supplies for the next 20 years.
5. The Project parcels have overlying water rights assigned to them pursuant to the 2004 adjudication of the Beaumont Groundwater Basin (Judgment). They are identified in the Beaumont Basin Watermaster's reporting as an Overlying Party and as "Sunny-Cal Egg and Poultry Company," consisting of the following nine Assessor's Parcel Numbers: 407-190-016, -17, 407-230-022, -23, -24, -25, -26,

-27, and -28.[1] According to the Watermaster's 2020 Annual Report, the Project site has an overlying water right of 1,114.99 AFY.

6. The Safe Yield of the Beaumont Basin is 6,700 AFY. The Judgment defines Safe Yield as "the maximum quantity of water which can be produced annually from a groundwater basin under a given set of conditions without causing a gradual lowering of the groundwater level leading eventually to depletion of the supply in storage." The Safe Yield was determined using a "detailed water balance of the basin and vicinity with the aid of a calibrated numerical groundwater flow model" (Harder, p. 1). The Project's overlying water right is part of the Safe Yield.
7. The Project has requested water service by BCVWD, which is an Appropriator Party to the adjudication. Pursuant to the adjudication, an Overlying Party can request water service from an Appropriator Party. When this happens, the Overlying Party must forgo extracting that volume of water provided by the Appropriator and the Appropriator shall have the right to produce the equivalent volume of water which the Overlying Party did not pump.
8. If an Appropriating Party serves recycled water to an Overlying Party, then the Overlying Party's water right is not diminished, but the Appropriator Party shall have the right to use that portion of the Overlying Water Right offset by the recycled water. In other words, serving recycled water to an Overlying Party allows the Appropriator to pump the equivalent amount of groundwater.
9. In its 2020 UWMP, BCVWD has projected sufficient groundwater supplies to meet customer demands for the next 20 years (2020 – 2040), including the previously approved Project, during normal years. Customers include agricultural and industrial accounts, which are both projected to increase somewhat over the planning period. The 2020 UWMP found that sufficient groundwater during drought years is contingent on imported water supplies to recharge the Beaumont Basin, the effectiveness of demand reduction measures, converting to recycled

[1] Exhibit D of the 2004 adjudication includes a 10th APN (406-080-013) which is no longer existing.

water where possible when it becomes available, and increased local recharge projects.

10. The Project site has an adjudicated water right of 1,114.99 AFY, and an estimated potable and non-potable water demand of 183 AFY (114 AFY potable and 69 AFY non-potable). Because the Project's projected water demands are substantially less than the overlying water right, and the Project would forgo producing the volume that will be supplied to the Project by BCVWD, and BCVWD has accounted for development of the site in its 20-year water demand projections for normal and drought years in the 2020 UWMP and determined that water supplies will be sufficient to meet District demands, water supplies will therefore also be sufficient to meet the projected water demand associated with the proposed Project in addition to the water supplier's existing and planned future uses, including agricultural and manufacturing uses.

Remainder of Page intentionally Left Blank

SECTION 6 - REFERENCES

	Cherry Valley Pass Acres & Neighbors v. City of Beaumont. Court of Appeal of California, Fourth District, Division Two. No. E049651. 190 Cal.App.4th 316 (Cal. Ct. App. 2010) Decided Nov. 22, 2010.
BBW(a)	Beaumont Basin Watermaster. *2020 Consolidated Annual Report and Engineering Report, Final.* June 22, 2021.
BBW(b)	Beaumont Basin Watermaster. *Resolution Nos. 2006-02, 2006-04, 2006-05, 2006-06, 2006-07, and 2006-08. A Resolution of the Beaumont Basin Watermaster Recognizing the Designation of a Specific Amount of Overlying Water Rights to Specific Parcels.* February 7, 2006, April 17, 2006, June 13, 2006, June 13, 2006, June 13, 2006, and June 13, 2006.
BBW(c)	Beaumont Basin Watermaster. *Resolution No. 2015-1, A Resolution of the Beaumont Basin Watermaster Adopting the Final 2013 Reevaluation of the Beaumont Basin Safe Yield Report and Redetermining the Safe Yield of the Basin.* February 4, 2015.
BCVWD(a)	Beaumont-Cherry Valley Water District. *Water Supply Assessment for Sunny-Cal Specific Plan Project*. March 8, 2005.
BCVWD(b)	Beaumont-Cherry Valley Water District. *Regulations Governing Water Service, Part 5 Charges.* February 2000.
BCVWD(c)	Beaumont-Cherry Valley Water District. January 7, 2015 Board of Directors regular meeting. *Consideration of Request for Updated "Will Serve Letter" and Annexation for Sunny-Cal Specific Plan Project Tentative Tract Map 36583).*
BCVWD(d)	Beaumont-Cherry Valley Water District. *Potable Water System Master Plan Final.* Adopted January 13, 2016.
BCVWD(e)	Beaumont-Cherry Valley Water District. *FY 2021 Operating and 2021-2025 Capital Improvement Budget*. Adopted December 14, 2020.
GP	City of Beaumont. *Beaumont General Plan.* December 1, 2020. (http://www.beaumontca.gov/DocumentCenter/View/36840/Beaumont-Zoning-Map-Final)
Hahn, 2010	Hahn Water Resources, LLC. *Report on the Sustainability of the Beaumont Basin and Beaumont Management Zone*, prepared for the SGPWA, November 2010.
Harder	Thomas Harder & Co. Groundwater Consulting in association with Alda, Inc. *Beaumont Basin Watermaster 2013 Reevaluation of the Beaumont Basin Safe Yield.* April 3, 2015.
Judgment	*San Timoteo Watershed Management Authority, vs. City of Banning, et al.* Superior Court, Riverside County, Case No. RIC 389197, February 4, 2004.
Kimley-Horn	Kimley-Horn. *Beaumont Summit Station Specific Plan, Draft July 2021*.
Kimley-Horn(b)	Kimley-Horn. *Beaumont-Cherry Valley Water District Draft Water Supply Assessment for Potrero Logistics Center*, December 2020. (Contained within BCVWD Engineer Workshop meeting packet for December 14, 2020, pp. 201 to 297.)

Marr	Charles Marr Consulting and PACE, Inc. *Water Supply Assessment for Beaumont Pointe.* Revised April 13, 2021.
NAIOP	NAIOP Research Foundation. *Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space.* L. Nicolas Ronderos, Director, Urban Development Programs Regional Plan Association, March 2010. Available at https://www.naiop.org/en/Research-and-Publications/Reports/Logistics-Trends-and-Specific-Industries.
NOP	Draft Notice of Preparation of a Draft Environmental Impact Report (EIR) for the Beaumont Summit Station project.
Ord. No. 1069	City of Beaumont. *An ordinance of the City Council of the City of Beaumont, California amending Chapter 17.06 "Landscape Standards" of the Beaumont Municipal Code*. January 19, 2016.
SGPWA 2021	Tully & Young. *San Gorgonio Pass Water Agency 2020 Urban Water Management Plan.* Adopted June 21, 2021.
Stantec	Stantec Consulting Inc. *Sunny-Cal Specific Plan*, August 2007.
TTM 36583	Beaumont-Cherry Valley Water District Board of Directors meeting. *Consideration of Request for Updated "Will Serve Letter" and Annexation for Sunny-Cal Specific Plan Project Tentative Tract Map 36583 (Located south of Cherry Valley Boulevard/North of Brookside Avenue/west of Hannon Road/east of Interstate 10 freeway.* January 7, 2015.
USDE	U.S. Department of Energy. *Guidelines for Estimating Unmetered Landscaping Water Use (PNNL-19498)*, KL McMordie Stoughton. July 2010. Available at https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-19498.pdf.
UWMP	Beaumont-Cherry Valley Water District. *2020 Urban Water Management Plan public review draft.* July 2021.
UWMP(a)	Beaumont-Cherry Valley Water District. Letter to Todd Parton, City Manager for City of Beaumont on City of Beaumont's comments on the BCVWD Draft 2020 UWMP. August 12, 2021.
WEI, 2005	Wildermuth Environmental, Inc. (2005). *Integrated Regional Water Management Program for the San Timoteo Watershed, Final Draft*, prepared for the San Timoteo Watershed Management Authority, June 2005.