

RESOLUTION 2020-28

**A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE BEAUMONT-CHERRY VALLEY WATER DISTRICT
TO APPROVE THE WATER SUPPLY ASSESSMENT (WSA) FOR
THE POTRERO LOGISTICS CENTER PROJECT**

WHEREAS, the Potrero Logistics Center site is approximately 32 gross acres located on the proposed extension of Potrero Boulevard, upon Riverside County Assessor's Parcel Nos. 424-010-020, 424-010-009 and 424-010-010; and

WHEREAS, the project consists of a 577,920 square foot warehouse building with two office spaces that would total approximately 20,000 square feet, therefore qualifying as a "project" under the Water Code, and requiring the preparation of a Water Supply Assessment; and

WHEREAS, the Water Supply Assessment (WSA) has been prepared in accordance with Water Code §10910 (c)(1) and SB 610; and

WHEREAS, the Beaumont-Cherry Valley Water District Board of Directors has the authority and responsibility for approving the WSA; and

WHEREAS, Beaumont-Cherry Valley Water District staff reviewed the WSA prepared by the Applicant's engineer, which includes any and all WSA addendums; and

WHEREAS, the WSA relied on existing information in the Urban Water Management Plan and more recent District water planning analysis and did conclude that the District has sufficient water supplies to serve the Project; and

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of the Beaumont-Cherry Valley Water District finds and determines as follows:

1. The above recitals are true and correct and reflect the independent judgment of the Board
2. The WSA was prepared in accordance with the California Water Code
3. The conclusions set forth in the WSA are supported by substantial evidence and reasonable analysis, and are consistent with District policies, plans, documents and operations; and
4. The WSA demonstrated that the District's water supplies are sufficient to satisfy the water demands of the Project, while still meeting the current and projected future water demands of the community.

NOW THEREFORE, BE IT FURTHER RESOLVED that, in the exercise of independent judgment, and taking into consideration the WSA and engaging in due deliberations, the Board does hereby adopt the Potrero Logistics Center Water Supply Assessment.

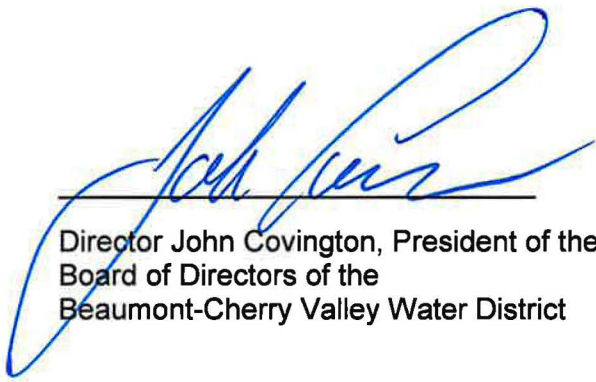
ADOPTED this 14th day of December 2020, by the following vote:

AYES: Covington, Hoffman, Slawson, Williams

NOES:

ABSTAIN:

ABSENT: Ramirez



Director John Covington, President of the Board of Directors of the Beaumont-Cherry Valley Water District

ATTEST:



Director Lona Williams, Secretary to the Board of Directors of the Beaumont-Cherry Valley Water District

Attachment: Water Supply Assessment for the Beaumont-Potrero Interchange Industrial Warehouse prepared by Kimley-Horn (Potrero Logistics Center)



**BEAUMONT-CHERRY VALLEY
WATER DISTRICT**

560 MAGNOLIA AVENUE

BEAUMONT, CALIFORNIA 92223

www.bcvwd.org

FINAL

WATER SUPPLY ASSESSMENT

for

POTRERO LOGISTICS CENTER

City of Beaumont, CA

DECEMBER 2020

As Approved by BCVWD December 14, 2020

Kimley»Horn

CONTENTS

Contents	i
List of Figures	iii
List of Tables	iv
1. Introduction	6
2. Water Supply Assessment (WSA) Legislative Requirements	8
2.1 Senate Bill 221 (SB 221)	8
2.2 Senate Bill (SB 610).....	9
2.3 Summary.....	11
3. Urban Water Management Planning Act	12
3.1 Background.....	12
3.2 San Geronio Pass Water Agency 2015 UWMP	13
3.3 BCVWD's 2015 UWMP	14
4. Potrero Logistics Center Project Description	16
4.1 Existing Land Uses	19
4.2 Proposed Land Uses	19
4.3 Existing Water Demand	21
4.4 Proposed Water Demand	21
5. BCVWD Water System	23
5.1 Overview of BCVWD's Water System and Operation	25
5.2 Potable Water System	25
5.3 Imported Water and Recharge Facilities	26
5.4 Non-Potable (Recycled) Water System	27
6. Updated Water Demands In San Geronio Pass Area	29
6.1 Regional Water Supply and Demand Spreadsheet Models	29
6.1.1 City of Banning	30
6.1.2 YVWD/City of Calimesa	32
6.1.3 BCVWD	36
6.2 Summary of Member Agency Imported Water Demands on SGPWA	42

7. SGPWA Available Imported Water	44
7.1 State Water Project (SWP) Table A.....	44
7.2 Yuba Accord Water	45
7.3 San Bernardino Valley Municipal Water District (SBVMWD Water).....	45
7.4 Avek-Nickel Water	46
7.5 City of Ventura and Casitas Municipal Water District (Ventura Water) and Other Exchanges ..	46
7.6 Delta Conveyance [formerly California Water Fix (CWF)]	47
7.7 Sites Reservoir.....	48
7.8 Sale of State Water Project Contractors Incremental CWF Reliability Benefits	49
7.9 Purchase or Leasing of Metropolitan's CWF Phase 2 Water	50
7.10 Other Sources of Imported Water	50
7.10.1 Article 21 Water.....	50
7.10.2 Turn-Back Pool Water	51
7.10.3 Short-Term or Long-Term Water Transfers or Exchanges	51
7.10.4 Recommendations for SGPWA.....	51
7.11 Summary of Available Imported Water Supplies	51
7.12 Contingency Plan.....	55
8. Water Supply and Demand for BCVWD	56
9. Water Supply Single and Multiple Dry Period Analysis	58
9.1 Water Source Availability.....	58
9.1.1 Groundwater.....	58
9.1.2 Imported Water.....	60
9.1.3 Recycled Water	66
9.1.4 Stormwater and Other Local Water Resources	67
9.2 Water Demands During Critical and Multi-Year Periods	67
10. Conclusions	72
11. References.....	74
12. Appendix	77

LIST OF FIGURES

Figure 1-1. Project APNs	7
Figure 4-1. Vicinity Map	17
Figure 4-2. Site Plan	18
Figure 4-3. Landscaping Area	20
Figure 5-1. BCVWD Boundary and Sphere of Influence.....	24
Figure 6-1. City of Beaumont Single Family Home Permits.....	37
Figure 7-1. SGPWA Imported Water Demand vs Potential Imported Water Supply	54
Figure 8-1. BCVWD's Water Supply and Demand Projection to 2040	57
Figure 8-2. BCVWD's Groundwater Storage Balance to 2040.....	57
Figure 8-3. BCVWD Historic Beaumont Basin Groundwater Storage Account	59
Figure 9-1. Sites Reservoir Available Water 2030 and 2070 (Attachment D9).....	62

LIST OF TABLES

Table 3-1. Projected Water Demands on SGPWA (AF)	13
Table 3-2. BCVWD Imported Water Needs from BCVWD 2015 UWMP (Table 6-26)*	15
Table 4-1. Existing Land Use	19
Table 4-2. Proposed Land Uses and Alternatives	19
Table 5-1. BCVWD Potable and Non-potable Water Connections and Deliveries 2019	25
Table 6-1. Major Development Projects in City of Banning	30
Table 6-2. Summary of Spreadsheet Supply-Demand Model for City of Banning	32
Table 6-3. Major Development Projects in YVWD in SGPWA (City of Calimesa)	32
Table 6-4. YVWD SGPWA Imported Water Demands.....	34
Table 6-5. Summary of Spreadsheet Supply-Demand Model for YVWD (City of Calimesa)	35
Table 6-6. Major Development Projects in Planning or Construction Stages	36
Table 6-8. Summary of Spreadsheet Supply-Demand Model for BCVWD.....	40
Table 6-9. Regional Summary of Spreadsheet Supply-Demand Model for SGPWA.....	43
Table 7-1. Estimated Amount of Article 21 Water Available to SGPWA Based on 0.5% of Total Available AF.....	50
Table 7-2 SGPWA Current and Projected Available Imported Water Supply through 2040	52
Table 7-3 Regional Summary of SGPWA Imported Water Supply, AFY	53
Table 9-1. Summary of BCVWD's Forbearance and Reallocated Overlier Pumping Rights	60
Table 9-2. Groundwater Available from Edgar Canyon for Single and Multiple Dry Year Analysis	60
Table 9-3. SGPWA SWP Delivery Capability as Percent of Table A (Based on 2015 DWR SWP Delivery Capability Report)	61
Table 9-4. SGPWA SWP Delivery Capability as Percent of Table A (Used for WSA Reliability Analysis)	61
Table 9-5. SGPWA Preliminary Amount of Sites Reservoir Water Available, AFY	63
Table 9-6. Regional Summary of SGPWA Imported Water Supply Single Dry Year, AFY	63

Table 9-7. Regional Summary of SGPWA Imported Water Supply Two Consecutive Dry Years, AFY.....	64
Table 9-8. Regional Summary of SGPWA Imported Water Supply Three Consecutive Dry Years, AFY	64
Table 9-9. Regional Summary of SGPWA Imported Water Supply Six Consecutive Dry Years, AFY.....	65
Table 9-10. Summary of SGPWA Regional Imported Water Supply and Demand Single and Multiple Dry Years.....	65
Table 9-11. Member Agency’s Percent of Available Imported Water When Demand Exceeds Supply.....	66
Table 9-12. BCVWD Available Imported Water During Single and Multiple Dry Year Periods ...	66
Table 9-13. BCVWD Available Recycled Water During Single and Multiple Dry Year Periods ..	67
Table 9-14. Ratio of Dry Period Precipitation to Average Precipitation at Beaumont and Estimated New Water from Storm Water Capture and Local Water Resource Projects.....	67
Table 9-15. BCVWD Water Supply Summary – Critical Dry Year.....	68
Table 9-16. BCVWD Water Supply Summary – 2 Consecutive Dry Years	69
Table 9-17. BCVWD Water Supply Summary – 3 Consecutive Dry Years	70
Table 9-18. BCVWD Water Supply Summary – 6 Consecutive Dry Years	71



1. INTRODUCTION

The Potrero Logistics Center ("Project") is a development plan for an approximately 32-acre site located on the proposed extension of Potrero Boulevard in the City of Beaumont ("City"). The project is a two-story tilt-up "high-cube" logistics warehouse building of approximately 577,920 square feet of industrial building. The Plan has been submitted by ASM Beaumont Investors, LLC, ("Client" or "Project Applicant").

The Project site is in the southwest portion of the City of Beaumont, south of State Route 60 (SR-60) and approximately 1.0-mile west of Interstate 10 (I-10). The site is bounded to the north by SR-60 and the Heartland Specific Plan, to the east by Potrero Boulevard and vacant parcels, to the south by the unpaved alignment of 4th Street, and to the west by undeveloped parcels.

The Project site is composed of three Assessor Parcel Numbers (APNs). APNs 424-010-020 and 424-010-009 will contain the warehouse facility, including the warehouse structures and parking. APN 424-010-010, an approximately 28-acre lot, will remain vacant and undeveloped (see **Figure 1-1**).

APN 424-010-020 is located in the City; APN 424-010-009 and APN 424-010-010 are located in the County of Riverside (County). The Project will require the annexation of parcels 424-010-009 and 424-010-010 (Annexation Area) into the City to allow for development of the Project. The Project will also require a General Plan Land Use and Zoning amendment which the applicant has requested.

The City of Beaumont is a City in Riverside County, California, located at an approximate elevation of 2600 ft. in the San Geronio Pass Area south of Southern California's highest peak, San Geronio Mountain, and north of San Jacinto peak. In 2017, the City's population was estimated at 46,967. Beaumont is bounded on the east by the City of Banning, on the south by the City of San Jacinto, on the west by the City of Calimesa, and on the north by the unincorporated community of Cherry Valley. **Figure 4-1** depicts the project site location (see Section 4).

The Riverside County Fire Department has identified a fire flow requirement for the project of 4,000 gpm for 4 hours at 20 psi residual. The project site is within the Beaumont-Cherry Valley Water District (BCVWD) service area.

California Water Code §10910 specifies that any city or county that determines that a project, as defined in §10912, is subject to the California Environmental Quality Act (CEQA) Division 13 (commencing with §21000) of the Public Resources Code. These legislative requirements are described in Section 2 of this report.

A will serve letter was issued in December 2017, which expired in December 2018. The approval included a maximum demand not to exceed 8,700 gallons per day or 15 Equivalent Dwelling Units for the proposed overall development. Due to the increased size of the project and the need to annex a portion of the project into BCVWD, this WSA has been prepared.

As the Project site's water purveying agency, BCVWD is responsible for the preparation of a WSA. The WSA uses the information presented in the relevant Urban Water Management Plan (UWMP) to support existing water supply entitlements, water rights, and water service contracts relevant to the water supply for the proposed Project, water received in prior years pursuant to those entitlements, and any additional planned water supplies, to assess whether sufficient water supplies would be available for the proposed Project. The Project Applicant, ASM Beaumont Investors, LLC has requested that Kimley-Horn and

Associates, Inc. ("Kimley-Horn") prepare a WSA in accordance with these statutes and BCVWD's requirements.

The Conceptual Site Plan is shown on **Figure 4-2** (see Section 4). The conceptual site plan may undergo minor revisions as the project goes through the entitlement process, however the water demands presented herein represent the maximum demands.

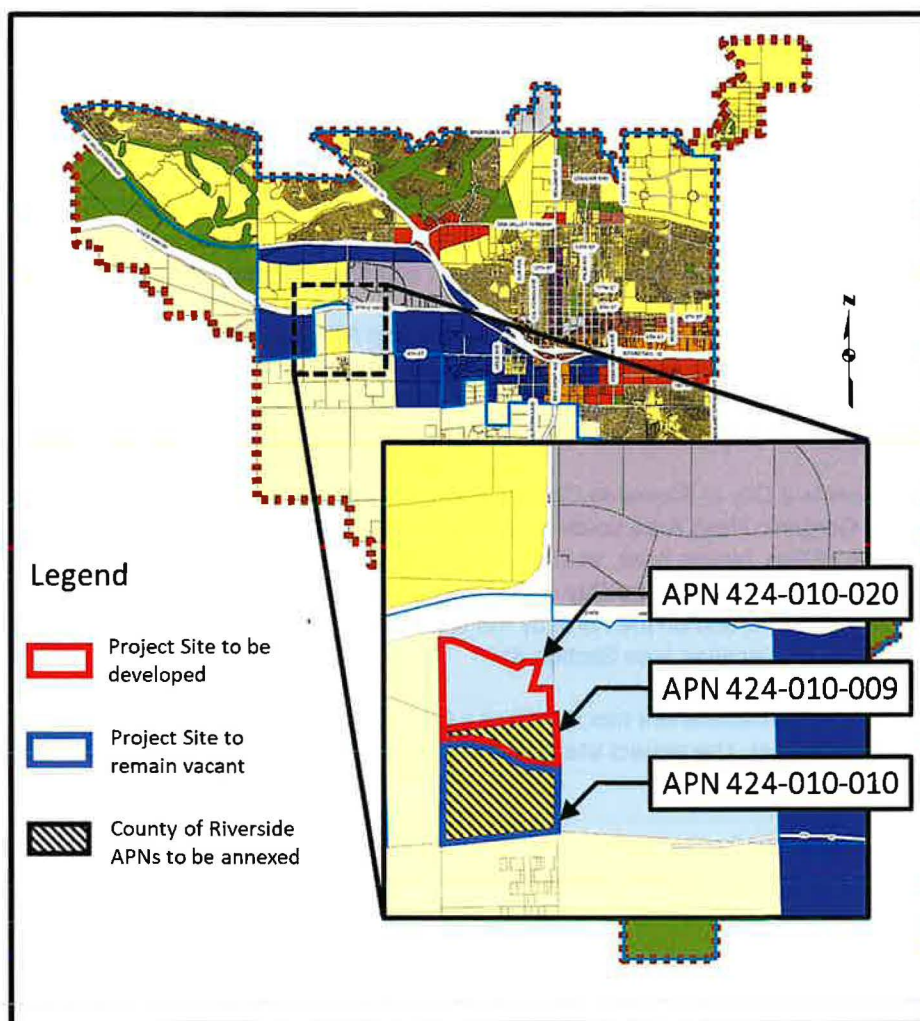


Figure 1-1. Project APNs

2. WATER SUPPLY ASSESMENT (WSA) LEGISLATIVE REQUIREMENTS

There were two Senate Bills, passed in 2001, to advance water supply planning efforts in California and provide the foundation for developing comprehensive water policies to meet future water needs by integrating water supply and land use planning. These were Senate Bill 221 (SB 221) and Senate Bill 610 (SB 610). The intent was to provide assurance that any new projects would have a reliable water supply, and the impacts of the new developments on existing water users, i.e. those relying on common water sources, and decision makers, were adequately informed of the proposed project's water use, the impacts, and plans to maintain water supplies.

2.1 SENATE BILL 221 (SB 221)

SB 221 applies to residential subdivisions and chaptered in Government Code §65867.5 et seq which states:

- (c) *A development agreement that includes a subdivision, as defined in Government Code §666473.7, shall not be approved unless the agreement provides that any tentative map prepared for the subdivision will comply with the provisions of §666473.7.*

Government Code §666473.7 states:

- (a) *for purposes of this section, the following definitions apply:*
 - (1) *"Subdivision" means a proposed residential development of more than 500 dwelling units, except that for a public water agency that has fewer than 5,000 service connections, "subdivision" means any proposed residential development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections.*
 - (b)(1) *The legislative body of a city or county or the advisory agency, to the extent that it is authorized by local ordinance to approve, conditionally approve, or disapprove the tentative map, shall include as a condition in any tentative map that includes a subdivision, a requirement that a sufficient water supply shall be available. Proof of the availability of a sufficient water supply shall be requested by the subdivision applicant or local agency and shall be based on written verification from the applicable water supply system within 90 days of a request.*
 - (i) *Government Code §666473.7 shall not apply to any residential project proposed for a site that is within an urbanized area and has previously been developed for urban uses, or where the immediate contiguous properties surrounding the residential project site area, or previously have been, developed for urban uses, or housing projects that area exclusively for very low and low-income households.*
 - (a)(2) *"Sufficient water supply" means the total water supplies available during normal, single-dry and multiple-dry years within a 20-year projection that will meet the projected demand associated with the proposed subdivision, in addition to existing and planned future uses, including but not limited to agricultural and industrial uses.*

This is not intended to mean that 100 percent of the development's unrestricted water demand must be met 100 percent of the time, nor does it mean that new development may not have an impact on the service level of existing customers. A "sufficient water supply" may be found to exist for a proposed project and for existing customers, even where a drought-induced shortage may occur, as long as a minimum water supply can be estimated and planned for during a drought.

2.2 SENATE BILL (SB 610)

SB 610, chaptered in Water Code §10910 et seq, requires a city or county that determines a "project," as defined in Water Code §10912, is subject to the California Environmental Quality Act (CEQA), the city or county must identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment (WSA), except as otherwise specified. Water Code §10912 defines a "Project" as 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 (sq. ft) of floor space.*
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 sq. ft. 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 sq. ft. of floor area.*
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.*
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.*

The basic question to be answered in the WSA is:

Will the water supplier's total projected water supply during normal, dry, and multiple dry years during a 20-year projection meet the projected water demand of the proposed project, in addition the water supplier's existing and planned future uses, including agricultural and manufacturing uses?

The WSA, under SB 610, is to include the following, if applicable to the supply conditions:

1. Discussion regarding 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.
2. Identification of existing water supply entitlements, water rights, or water service contracts secured by the purveying agency and water received in prior years pursuant to those entitlements, rights, and contracts.

3. Description of the quantities of water received in prior years by the public water system under the existing water supply entitlements, water rights or water service contracts.
4. Water supply entitlements, water rights or water service contracts shall be demonstrated by supporting documentation such as the following:
 - a. Written contracts or other proof of entitlement to an identified water supply.
 - b. Copies of 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 to be able to convey or deliver the water supply.
5. Identification of other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system.
6. If groundwater is included for the supply of a proposed project, the following additional information is required:
 - a. Description of groundwater basin(s) from which the proposed project will be supplied. Adjudicated basins must have a copy of the court order or decree adopted and a description of the amount of groundwater the public water system has the legal right to pump. For non-adjudicated basins, information on whether the California Department of Water Resources has identified the basin 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 of Water Resources that characterizes the condition of the basin, a detailed description of the efforts being undertaken in the basin to eliminate the long-term overdraft.
 - b. Description and analysis of the amount and location of groundwater pumped by the public water system for the past five (5) years from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
 - c. Description and analysis of the amount and location of groundwater projected to be pumped by the public water system from any groundwater basin from which the proposed project will be supplied. Analysis should be based on information that is reasonably available, including, but not limited to, historic use records.
 - d. Analysis of sufficiency of the groundwater from the basin(s) from which the proposed project will be supplied.
7. The water supply assessment shall be included in any environmental document prepared for the project.

SB 610 prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with requirements relating to the submission of the assessment.

SB 610 requires the public water system, or the city or county, as applicable, if that entity concludes that water supplies are, or will be, insufficient, to submit the plans for acquiring additional water supplies.

SB 610 requires the city or county to include the water supply assessment and certain other information in any environmental document prepared for the project pursuant to the act.

2.3 SUMMARY

Senate bills 221 and 610 are quite similar; SB 221 applies to proposed residential subdivisions over 500 dwelling units or a subdivision project that proposes 10 percent of the number of existing agency water connections, whichever is smaller; SB 610 to other types of large projects or mixed-use projects. Both require documentation of water supply and demand under normal, dry and multiple dry year scenarios to accommodate the project plus existing and known planned projects. Both rely on the agency's Urban Water Management Plan (UWMP) for support.

Based on the description in the introduction, the proposed **Potrero Logistics Center project requires a Water Supply Assessment pursuant to SB 610 under Section 10912 (a) (2)**. The Project includes a proposed business establishment having more than 500,000 square feet of floor space. The Project proposes 577,920-square feet of floor space. For the Project, the water purveyor is BCVWD.

3. URBAN WATER MANAGEMENT PLANNING ACT

3.1 BACKGROUND

The California Water Code requires that all urban water suppliers within the state, serving over 3,000 acre-feet (AF) of water (1 AF = 325,829 gallons) or having at least 3,000 service connections, prepare Urban Water Management Plans (UWMPs) on a five-year, ongoing basis demonstrating their continued ability to provide water supplies for current and future expected development under normal, single dry and multiple dry year scenarios. The Urban Water Management Planning Act was enacted in 1983 and amendments were made periodically since then. The Act also requires imported water suppliers to prepare UWMPs. Water Code sections §10610 through §10656 detail the information that must be included in the plans. These plans also require the assessment of urban water conservation measures and wastewater recycling. They also require, pursuant to §10632, a water shortage contingency plan, outlining how the municipal water provider will manage water shortages of up to 50 percent of their normal supplies in a given year.

An UWMP is a planning tool that provides general guidance to water management agencies. It provides managers and the public with high altitude overview on a number of water supply issues facing the agency. It is not a substitute for project-specific planning documents, nor was it intended to be when mandated by the State Legislature. When specific projects are chosen to be implemented, detailed project plans are prepared, environmental analysis, if required, is prepared, and financial and operational plans are developed.

- "A plan is intended to function as a planning tool to guide broad-perspective decision making" by water agency managers and directors. It should not be viewed as an exact blueprint for supply and demand management. Water management in California is not a matter of certainty and planning projections may change in response to a number of factors. "Long-term water planning involves expectations and not certainties. The Court has recognized the uncertainties inherent in long-term land use and water planning and observed that the generalized information required ...in the early stages of the planning process are replaced by firm assurances of water supplies at later stages." It is appropriate to look at the UWMP as a general planning framework, not a specific action plan. It is an effort to generally answer a series of planning questions including: What are the potential sources of supply and what is the reasonable probable yield from them?
- What is the probable demand, given a reasonable set of assumptions about growth and implementation of good water management practices?
- How well do supply and demand figures match up, assuming that the various probable supplies will be pursued by the implementing agency?

Based on the answers to these questions, the implementing agency will pursue feasible and cost-effective options and opportunities to meet demands.

Overall, the demands for the Project have been refined herein based upon a specific water demand projection based upon the most recent proposed land uses of the development.

The Urban Water Management Planning Act requires the supplier to document water supplies available during normal, single dry, and multiple dry water years during a 20-year projection and the existing and projected future water demand during a 20-year projection. The Act requires that the projected supplies and demands be presented in 5-year increments for the 20-year projection period.

Like SB 610 and SB 221, specific levels of supply reliability are not mandated (i.e., whether a specific level of demand can be met over a designated frequency); rather, the law provides that it is a local policy decision of the water provider as part of the planning process. As provided for in the law, this WSA relies on the data in the latest UWMP in assessing the water demand of the proposed project relative to the overall increase in demands expected by the UWMP.

The Potrero Logistics Center development was included in **Table 3-6** of BCVWD’s 2015 UWMP as well as their 2013 UWMP.

In late 2017 and 2018, BCVWD prepared a set of “White Papers” that evaluated the growth in demand within the SGPWA and the current and future water supply from the SGPWA on a regional basis. The result of this evaluation is a reduction in the rate of growth and a refinement in the imported water supply.

3.2 SAN GORGONIO PASS WATER AGENCY 2015 UWMP

The Potrero Logistics Center is located within the service area of the San Gorgonio Pass Water Agency (SGPWA or Pass Agency). BCVWD provided data to SGPWA on BCVWD’s projected demands so the SGPWA could prepare their UWMP. **Table 3-1**, extracted from SGPWA’s 2015 UWMP, is shown below. SGPWA’s 2015 UWMP states the “retail purveyor demands that reflect reasonably anticipated supplies through the planning periods” and take into account non-SGPWA supplies available to the retail purveyors, such as local groundwater, recycled water, etc.

Table 3-1. Projected Water Demands on SGPWA (AF)

Agency Name	2020	2025	2030	2035	2040
BCVWD	10,860	12,476	14,087	15,886	17,334
City of Banning	-	501	1,344	2,237	2,718
YVWD	1,809	1,967	2,162	2,391	2,644
Other	500	1,600	2,800	3,900	5,000
Total Water Demands	13,169	16,544	20,393	24,414	27,696

The “other” demands in **Table 3-1** reflect the demand from other agencies in SGPWA service area not currently receiving imported water from SGPWA.

Since the Potrero Logistics Center project was included in the demands in BCVWD’s 2015 UWMP, it is considered included in the 2015 SGPWA UWMP, adopted by SGPWA Board of Directors as Resolution No. 2017-03, on March 20, 2017.

In the introductory section of the SGPWA’s 2015 UWMP, the SGPWA reviewed the water supply and demand requirements on a regional basis and did not focus on specific conditions within the service area of the retail water agencies.

"It is the stated goal of SGPWA to import supplemental water and to protect and enhance local water supplies for use by present and future water users and to sell imported water at wholesale to local retail water purveyors within its service area. Based on conservative water supply and demand assumptions over the next 25 years in combination with conservation of non-essential demand during certain dry years, the [Urban Water Management] Plan successfully achieves this goal. It is important to note that this document has been completed to address regional resource management and does not address the particular conditions of any specific retail water agency or entity within the SGPWA service area. The retail urban water suppliers within SGPWA service area are preparing their own separate UWMPs, but SGPWA has coordinated with the retailers during development of this Plan to ensure a level of consistency with the retailers to the extent possible.

While the UWMP prepared by the SGPWA "does not address the particular conditions of any specific retail water agency..." BCVWD relies upon the policies and practices of the SGPWA as a foundation for regional water supply solutions. The SGPWA's regional planning document does not address local water conditions and BCVWD relies upon the policies of the SGPWA to provide comprehensive regional solutions related to the use of imported water in the Pass area. An example of the policies and practices adopted by the SGPWA and relied upon by BCVWD includes, but is not limited to the following:

- San Gorgonio Pass Water Agency, Ordinance No. 8, An Ordinance Establishing Rules and Regulations for SGPWA Water Service, February 7, 2005;
- San Gorgonio Pass Water Agency Strategic Plan, May 2012;
- San Gorgonio Pass Water Agency, Resolution No. 2014-02, A Resolution of the San Gorgonio Pass Water Agency Establishing a Policy for Meeting Future Water Demands, February 18, 2014;
- San Gorgonio Pass Water Agency, Ordinance No. 10, Ordinance Establishing Water Shortage Plan, July 21, 2014;
- San Gorgonio Pass Water Agency, Resolution No. 2015-05, Resolution of the Board of Directors of the San Gorgonio Pass Water Agency to Adopt Facility Capacity Fees for Facilities and Water, July 27, 2015;
- San Gorgonio Pass Water Agency, State of the Supply PowerPoint Presentation, September 30, 2016;
- San Gorgonio Pass Water Agency, Ordinance No. 13, An Ordinance Amending Rules and Regulations Regarding Authorization for Service, June 5, 2017.
- San Gorgonio Pass Water Agency Resolution 2019-03, A Resolution of the San Gorgonio Pass Water Agency Establishing a Policy for the Sale of Water which Agency may have in Groundwater Storage, May 6, 2019.

3.3 BCVWD'S 2015 UWMP

There were some minor differences between the projections in BCVWD's 2015 UWMP and the projections provided to SGPWA for their 2015 UWMP. These differences stemmed from the need for BCVWD to provide preliminary demand projections early on so the SGPWA could meet their prescribed deadline.

BCVWD's demands for imported water are presented in **Table 6-26** of BCVWD's 2015 UWMP and are repeated in **Table 3-2** below. **Table 3-2** shows the actual imported water demand to meet the potable

water demand plus the banking water demand to ensure drought-proofing of future development. If imported water is not available in a given year, no banking will occur. But when imported water is available, any deficiencies from previous years would be "carried over" and "made up." As can be seen, there is a slight difference between the demands in Table 3-2 versus those shown above (Table 3-1) from SGPWA's 2015 UWMP.

Table 3-2. BCVWD Imported Water Needs from BCVWD 2015 UWMP (Table 6-26)*

Demand	2020	2025	2030	2035	2040
BCVWD Drinking Water Demand, AFY	10,313**	11,407**	12,503	13,843	15,362
Banking Demands, AFY	1,000	1,500	2,000	2,500	2,500
Total BCVWD Imported Water Demand, AFY	11,313	12,907	14,503	16,343	17,862
*Taken from BCVWD 2015 UWMP, Table 6-26 and is equal to purchased imported water for recharge plus make-up to non-potable system plus water for banking					
** included imported water to non-potable water system since non-potable water system supplied with potable groundwater.					

4. POTRERO LOGISTICS CENTER PROJECT DESCRIPTION

The proposed warehouse Project consists of a two-story concrete tilt-up "high-cube" logistics warehouse building of approximately 577,920-square feet on approximately 32-acres, of which 9.94 acres will require annexation to the City of Beaumont and BCVWD.

The proposed building includes 564,480 square feet of warehouse and two (2) office spaces that total approximately 13,440 square feet, located at the southeast corner and northeast corners of the proposed warehouse. The truck bays (approximately 101 in total) will be oriented to face north and south.

To facilitate passenger car traffic there are two (2) passenger car driveways, one proposed on 4th Street (aligned) and the other incorporated with the Potrero Boulevard extension to be built in the existing right-of-way extending from the eastern property limit.

On-site water quality and storm drainage within the proposed warehouse development will be treated and conveyed through one or more large detention basin(s). There is also an existing drainage course that will need to be maintained through the site and will be isolated from the on-site storm drain system. The site will have a separate drainage system to prevent "comingling" of offsite flows with the onsite flows.

In addition to the site-specific development, the project will also include the construction of specific offsite improvements (including requisite water, sewer, and storm drain facilities to support the project) and street frontage improvements on Potrero Boulevard and 4th Street. Water improvements will include a connection to the water line in 4th Street immediately adjacent to the site and construction of a water line in Potrero Boulevard. Sewer service will be addressed by connecting to the existing lift station in 4th Street. Sewage will then be lifted to the nearest gravity main for transmission to the City of Beaumont Wastewater Treatment Plant. Storm drain improvements will consist of collecting and treating onsite flows prior to conveying them offsite to an existing storm drain system in 4th Street or directly into Coopers Creek.

The project is required to adhere to the landscaping standards in "Guide to California Friendly Landscaping" and the City of Beaumont's Landscape Ordinance which requires water efficient landscaping. Landscaping in no-turf areas shall be drought tolerant and irrigated with drip or bubbler type heads, per BCVWD requirements.



Figure 4-1. Vicinity Map

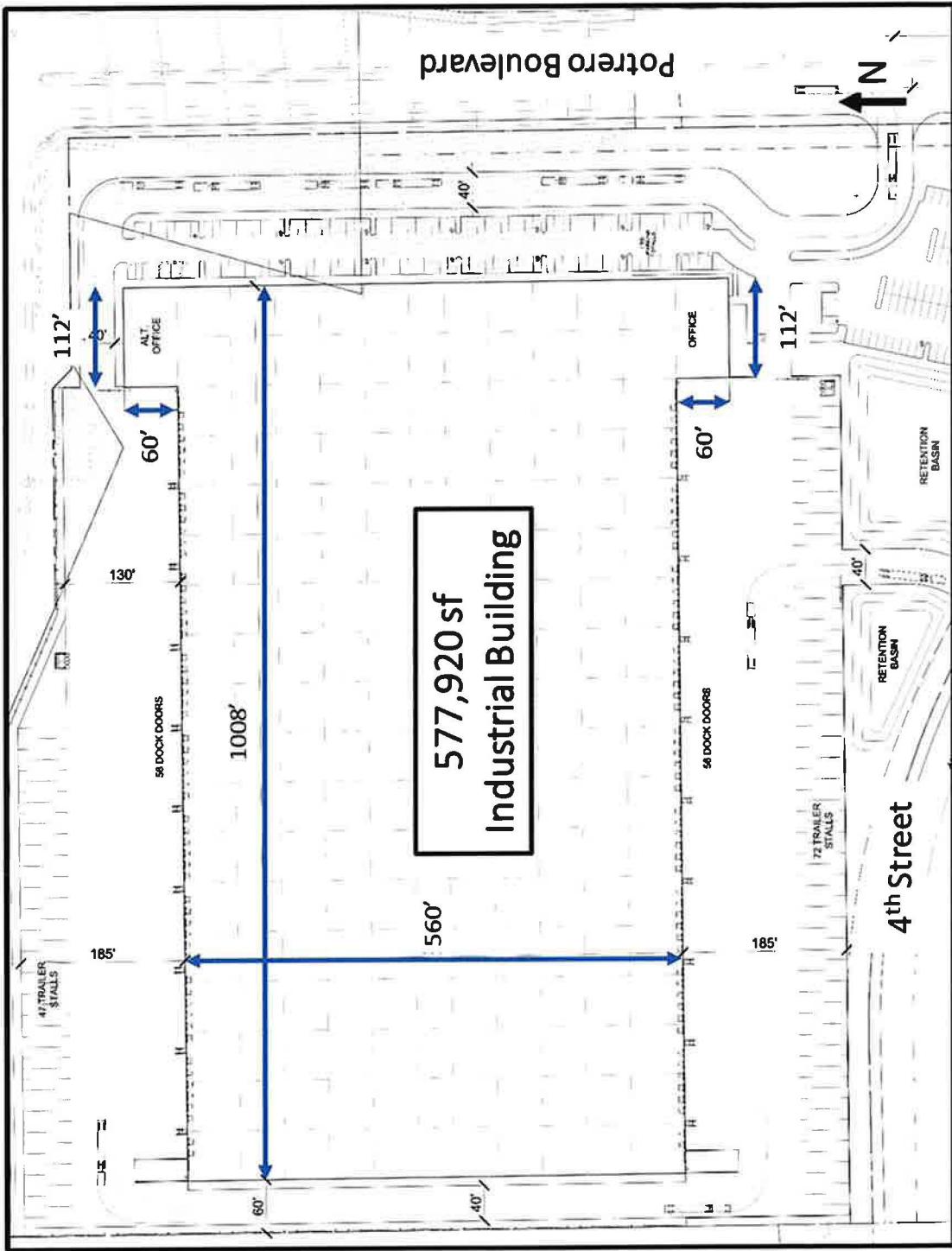


Figure 4-2. Site Plan

4.1 EXISTING LAND USES

The northern portion of the project site is designated within the Commercial Industrial Overlay, a single area of the City located in the Southwest Planning Area, south of the SR-60 Freeway. Permitted land uses within the Commercial Industrial Overlay are industrial, commercial, or a combination of both.

The southern portion of the project site is designated as single-family residential. This land use is intended for developments of 0 to 4 residential units per acre, corresponding to a population intensity of 14 persons per acre. **Table 4-1** shows the two-existing land uses in the project site, including acreage and APNs.

Table 4-1. Existing Land Use

Land Use	Project Area	APN
Commercial Industrial Overlay	21.32 acres	424-010-020
Single-Family Residential	9.94 acres	424-010-009

4.2 PROPOSED LAND USES

Table 4-2 shows the proposed land uses for the Project. The proposed land uses include logistics warehouse building and office space. Landscaping is proposed around the perimeter and on the slopes of the on-site retention basins. It should be noted that the bottom of the retention basins will not be landscaped as depicted in **Figure 4-3**.

Table 4-2. Proposed Land Uses and Alternatives

Land Use	Size (sf)
Warehouse Building	564,480
Office	13,440
Landscaping	193,100
Total	771,020

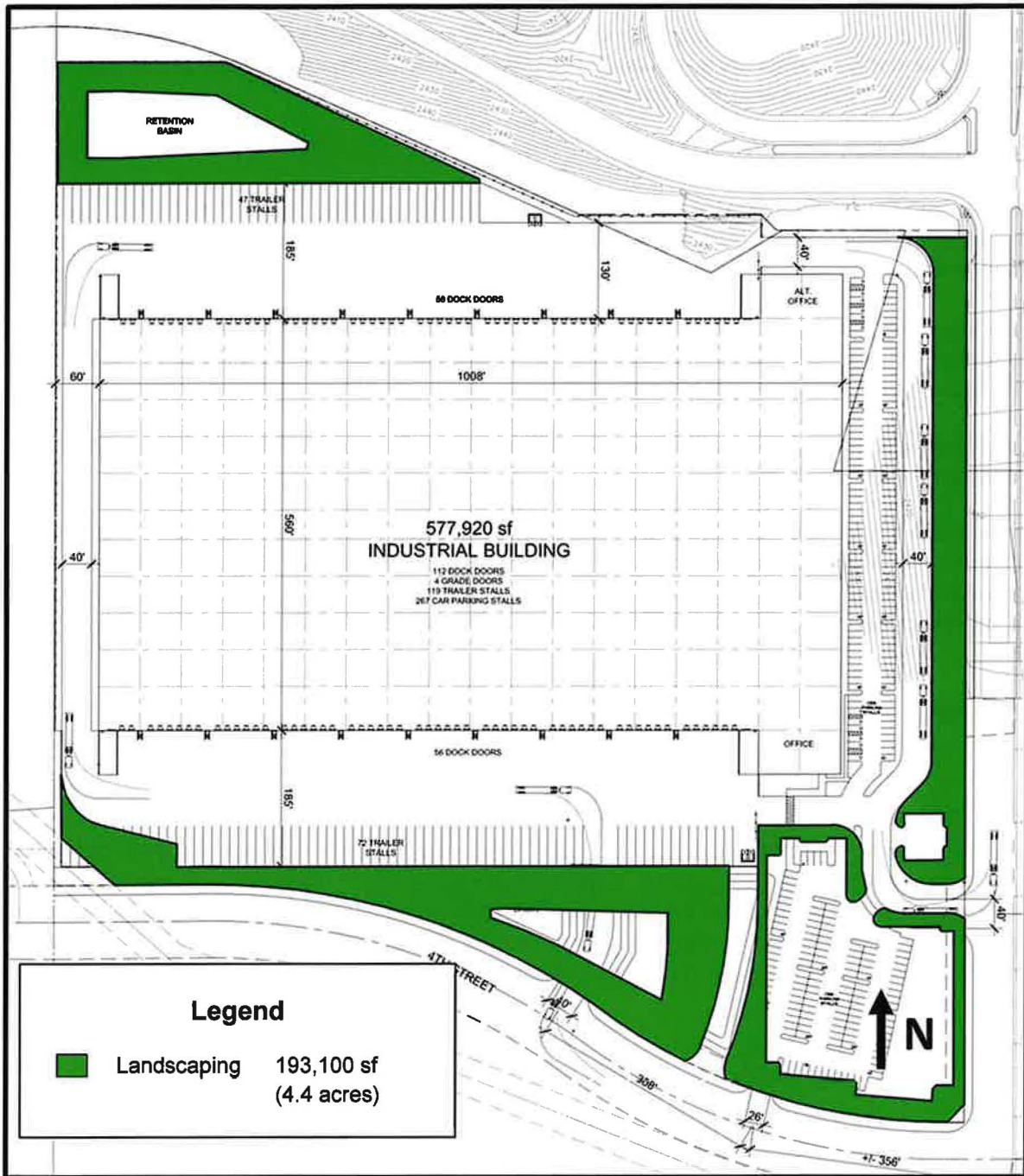


Figure 4-3. Landscaping Area

4.3 EXISTING WATER DEMAND

The site is currently vacant, hence there is no existing water demand at the site.

The BCVWD Board of Directors approved a Will Serve Letter request for the Project on June 11, 2014. The approval was granted for domestic and non-potable water demands not to exceed **22,000 gpd** (22.41 AFY or 34 EDUs) for the overall development.

4.4 PROPOSED WATER DEMAND

The proposed Project would include construction of buildings and facilities. Currently, there is no water demand on the Project site. The Project would utilize water-saving fixtures, which would reduce overall water demand.

The water demand for this project has been estimated based on demand projections consistent with the Hidden Canyon Industrial Project. The Hidden Canyon Industrial Project estimated demand is based on the total number of persons working at the facility.

An estimate of 1,500 square feet per employee was used, per a study performed by NAIOP (National Research Foundation) (2010).

Based on the project building area of 577,920 square feet and 1,500 square feet per employee yields a total number of employees of 385. Using 15 gallons per person per-day (Hidden Canyon Industrial Project demand estimation used for consistency) gives a total building demand of **5,775 gpd**. Based on 260 operating days per year (U.S. Energy Information Administration 2.12) equates to approximately 4.6 AFY.

To estimate landscaping water use, the following equation was used¹:

$$\text{Landscaping Water Use} = IF \times A \div IE$$

Where *IF* is the annual irrigation factor (gal/ft²-yr), *A* is the total landscaping area (ft²), and *IE* is the unitless irrigation efficiency. A reference value of 11.75 gal/ft²-yr was used representing moderate water demand in the Beaumont area. *A* was determined to be approximately 193,100 ft² as shown in Figure 4-3, with the landscaping area shown in green. A value of 0.65 was selected for *IE*. The irrigation system must have regular maintenance and proper scheduling to maintain this efficiency rating. Very well-designed sprinkler systems or drip irrigation systems may have higher efficiencies. The final calculation for water use by landscaping is as follows:

$$\text{Landscaping Water Use} = \left(11.75 \frac{\text{gal}}{\text{ft}^2 - \text{day}} \right) \times (193,100 \text{ ft}^2) \div 0.65$$

$$\text{Landscaping Water Use} = 9,563 \text{ gallons/day} = 10.7 \text{ AFY}$$

1. Guidelines for Estimating Unmetered Landscaping Water Use, U.S. Department of Energy
<https://www.pnnl.gov/main/publications/external/technical_reports/PNNL-19498.pdf>

The calculation above results in a landscaping water demand of 10.7 AFY or approximately 9,563 gpd. The demand was based on using drought tolerant landscaping on the slopes of the retention basins and property frontage along Potrero Boulevard and 4th Street. The bottoms of the retention basins will remain un-landscaped.

It is Kimley-Horn's understanding that there will be infrastructure in place to serve the project with recycled water, as BCVWD and the City of Beaumont are in discussions for the City to provide recycled water within the BCVWD service area.

The total demand including domestic (5,775 gpd) and landscape demand (9,563 gpd) equals 15,338 gpd which is less than the 22,000 gpd allotment in the original Will Serve Letter issued by BCVWD on June 11, 2014.

The domestic and fire flow service will be served from District's 2650 Pressure Zone. The Riverside County Fire Department has identified a fire flow requirement for the project 4,000 gallons per minute (gpm) for 4 hours at 20 pounds per sq. in. (psi) residual.

5. BCVWD WATER SYSTEM

BCVWD owns and operates the water system which would serve the Potrero Logistics Center. BCVWD was first formed in April 1919, to provide domestic and irrigation water to the developing community of Beaumont and the surrounding area.

BCVWD owns approximately 1,524 acres of watershed land north of Cherry Valley along the Little San Gorgonio Creek (also known as Edgar Canyon) and Noble Creek. There are two stream diversion locations within Little San Gorgonio Creek that are in the Department of Water Resources, Division of Water Rights, database. The diversions have pre-1914 recorded water rights amounting to 3,000 miners inch hours (MIH) or approximately 45,000 acre-feet per year (AFY) of right for diversion of water for domestic and irrigation uses. 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 creeks/canyons have been used for water development via diversions for irrigation and domestic service since the latter part of the 1800s. Currently, BCVWD diverts water from Little San Gorgonio Canyon Creek into a series of ponds adjacent to the creek where it percolates and recharges the shallow aquifers in the Canyon. BCVWD's wells located in Edgar Canyon provide about 10.5 percent of BCVWD's water supply.

Figure 5-1 shows BCVWD's present Service Boundary and Sphere of Influence (SOI). BCVWD's present service area covers approximately 28 square miles, virtually all of which is in Riverside County and includes the City of Beaumont and the community of Cherry Valley. BCVWD-owned watershed land extends across Riverside County line into San Bernardino County where BCVWD operates a number of wells and several reservoirs.

BCVWD's SOI, or ultimate service planning area, encompasses an area of approximately 37.5 square miles (14.3 sq. mi. is in the City of Beaumont). This SOI was established by the Riverside and San Bernardino County Local Agency Formation Commissions (LAFCOs). SOIs are established as a planning tool and help establish agency boundaries and avoid problems in service, unnecessary duplication of costs, and inefficiencies associated with overlapping service.

BCVWD's SOI is bounded on the west and north by the Yucaipa Valley Water District (YVWD) and on the east by the City of Banning. The northerly boundary of Eastern Municipal Water District (EMWD) is one-mile south of the BCVWD's southerly SOI boundary. The area between EMWD and the BCVWD's SOI is not within any SOI and could be annexed to either BCVWD or EMWD. BCVWD's SOI in Little San Gorgonio Canyon follows Oak Glen Road. The area west of Oak Glen Road is within YVWD's SOI; east of Oak Glen Road is within BCVWD's SOI.

The service area ranges in elevation from 2,300 feet above mean sea level in Fairway Canyon area of Beaumont on the southwestern boundary, to 2,900 feet in Cherry Valley, and to over 4,000 feet in the upper reaches of the SOI.

The area serves primarily as a "bedroom" community for the Riverside/San Bernardino Area and the communities east of Los Angeles County along the I-10 corridor.

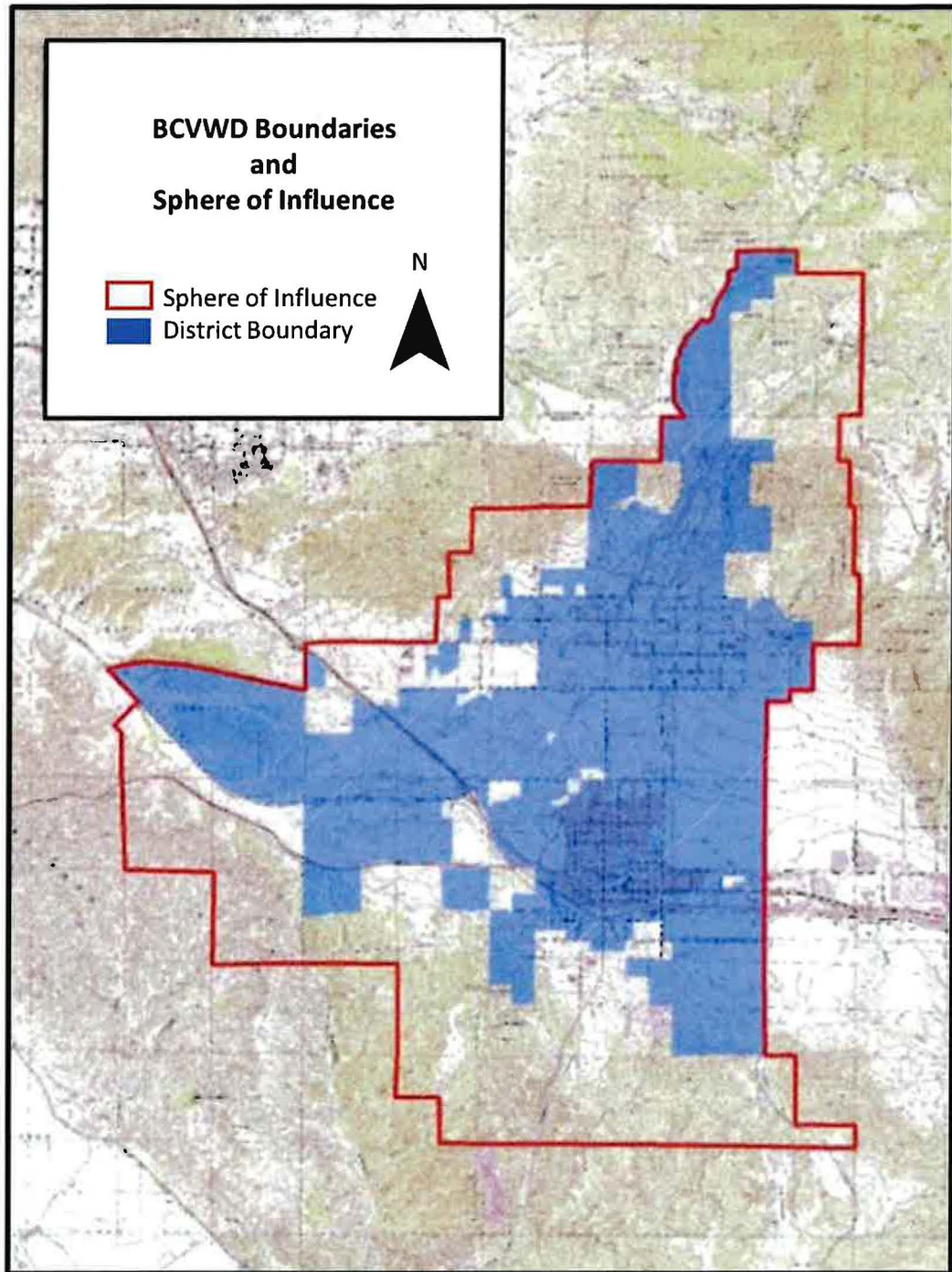


Figure 5-1. BCVWD Boundary and Sphere of Influence

Source: modified from USGS 1:24 000 topographic maps of Beaumont, Forest Falls, Yucaipa, and El Casco, CA

5.1 OVERVIEW OF BCVWD'S WATER SYSTEM AND OPERATION

BCVWD owns and operates both a potable and a non-potable water distribution system. BCVWD provides potable water and scheduled irrigation water to users through the potable water system. BCVWD provides non-potable water for landscape irrigation of parks, playgrounds, school yards, street medians and common areas through its non-potable (recycled) water system.

Table 5-1 presents BCVWD's 2019 potable and non-potable water connections and pumping amounts. The number of connections increased from 5,600 in the year 2000, before the housing boom that encompassed Western Riverside County and particularly Beaumont.

Table 5-1. BCVWD Potable and Non-potable Water Connections and Deliveries 2019

Connection / Delivery	Potable Water	Non-potable Water (Landscape)	Total
Number of Connections	19,339 ^(a)	309	19,648
Water Pumped, AFY	11,447 ^(b)	1,547	12,994
Average Annual, mgd	10.2	1.4	11.6
Maximum Day, mgd	19.2 ^(c)	4.3	NA
(a) 45 of these connections are agricultural water connections on potable water system. (b) 260 AF was transferred into Non-potable System for make-up. (c) Historic maximum day demand was 22.1 mgd in 2009.			

5.2 POTABLE WATER SYSTEM

BCVWD's potable water system is supplied by wells in Little San Gorgonio Creek (Edgar Canyon) and the Beaumont Groundwater Basin (sometimes called the Beaumont Storage Unit or the Beaumont Management Zone). BCVWD has a total of 24 wells; 1 well is a standby. Only 20 of the wells are used to any great extent. Twelve of the wells have auxiliary engine drives, a portable generator connection, or an in-place standby generator. BCVWD has 3 portable generators capable of operating 50, 350 and 500 horsepower (HP) motors. The Beaumont Groundwater Basin is adjudicated and managed by the Beaumont Basin Watermaster. BCVWD augments its groundwater supply with imported State Project Water (SPW) from the SGPWA which is recharged at BCVWD's recharge facility at the intersection of Brookside Ave. and Beaumont Ave. Overall, the water quality from BCVWD's wells is excellent. Total Dissolved Solids (TDS) is usually below 250 mg/L. Nitrates are only a sporadic problem in a few wells at present. BCVWD continues to monitor these wells per State Water Resources Control Board, (SWRCB) Division of Drinking Water (DDW) requirements. No wells have had to be taken out of service because of water quality concerns.

Wells in Edgar Canyon have limited yield, particularly in dry years, and take water from shallow alluvial and bedrock aquifers; wells in the Beaumont Basin are large capacity and pump from deep aquifers – some as deep as 1,500 ft. below the ground surface. The Edgar Canyon wells are very inexpensive to operate and are the preferred source; however, those wells are not able to meet the average day demand and need to be supplemented with the Beaumont Basin wells. The Edgar Canyon wells pump to a gravity transmission main that extends the full length of the BCVWD-owned properties in Edgar Canyon. The

transmission main connects to the distribution system in Cherry Valley. Water from the Edgar Canyon Wells, which is not used in the developed areas adjacent to Edgar Canyon or Cherry Valley, can be released to lower pressure zones, if needed.

During 2019, the Edgar Canyon Wells provided about 10.5 percent of BCVWD's total annual potable water supply; the rest is pumped from wells in the Beaumont Basin. BCVWD's total well capacity (Edgar Canyon and Beaumont Basin) is about 33 million gallons per day (mgd).

BCVWD is able to meet the maximum day demand (historic maximum about 22 mgd) with the largest well out of service. Wells with auxiliary power can supply up to 21.4 mgd.

Because of the range of topographic elevations in the BCVWD's service area, 11 pressure zones are needed to provide reasonable operating pressures for customers.

BCVWD has 14 reservoirs ranging in size from 0.5 million gallons (MG) to 5 MG. Total storage is approximately 22 MG, slightly more than 2 average days or 1 maximum day. The reservoirs provide gravity supply to their respective pressure zones. BCVWD's system is constructed such that any higher zone reservoir can supply water on an emergency basis to any lower zone reservoir. There are booster pumps in the system that allow water to be pumped up from a lower pressure zone to a higher-pressure zone also. This provides great flexibility in system operations. Sufficient reservoir redundancy exists permitting reservoirs to be taken out of service for maintenance.

The backbone transmission system in the main pressure zones is primarily 24-in diameter though there are some 30-in diameter pipelines leading to some reservoirs. The bulk of the backbone transmission and distribution pipe is ductile iron with cement mortar lining, that was installed in the last 10 to 15 years. There are a number of small, older, distribution lines in the system that are gradually being replaced over time with minimum 8-in diameter ductile iron pipe. The system is capable of providing over 4,000 gpm fire flow in the industrial/commercial areas of the service area.

5.3 IMPORTED WATER AND RECHARGE FACILITIES

BCVWD imported and storm water recharge facility consists of a 78-acre site on the east side of Beaumont Ave., between Brookside Ave. and Cherry Valley Blvd., where imported water is currently recharged. The recharge project site was selected after extensive hydrogeologic studies and pilot testing over a multi-year period. Phase 1 of the recharge facility, on the westerly half of the site, went on-line in late summer 2006. Phase 2 of the recharge facility was completed in 2014. This site has excellent recharge capability. Since its operation in 2006 through the end of 2018, 84,242 acre-ft (27.4 billion gallons) of imported water have been recharged. The capacity of the recharge site is conservatively estimated at 25,000 to 30,000 AFY, based on short term studies. With more aggressive maintenance, the capacity may be as much as 35,000 AFY.

BCVWD and Riverside County Flood Control and Water Conservation District (RCFC&WCD) are jointly in design of Beaumont MDP-Line16, a large diameter storm drain in Grand Ave., which drains a watershed area of 505 acres to BCVWD's recharge site. This project should be operational by 2022 and storm water from the project will be recharged. BCVWD also envisions recharging recycled water, not needed for irrigation, at the recharge site in the future, with appropriate treatment and permits.

The SGPWA imports State Project Water (SPW) through the East Branch Extension (EBX) of the California State Water Project (Governor Edmund G. Brown California Aqueduct). EBX Phase I was completed in 2003; EBX Phase II was completed in 2018. The completion of EBX Phase II improvements brings SGPWA's imported water delivery capacity to the Pass Area to 48 cubic feet per second (cfs) or 34,750 AFY if it was operational all year continuously.

BCVWD takes water from a 20-in diameter turnout and metering station at the current end of the EBX at Orchard Ave. and Noble Creek in Cherry Valley. The turnout was expanded to 34 cfs, (24,600 AFY if operated continuously) which became operational in 2019. Water from the turnout is metered by the Department of Water Resources (DWR) and then enters a 3,500-ft long, 24-in diameter gravity pipeline, constructed by BCVWD, which conveys the water to BCVWD's groundwater recharge site.

The 24-in diameter pipeline was constructed in 2006 and at 34 cfs would have a velocity of 10.8 ft/second — a reasonable velocity for a mortar-lined pipeline. If operated eleven months out of the year at that rate, the pipeline could convey 22,500 acre-ft per year. Higher velocities could be tolerated for short periods of time which would result in increased short-term delivery capacity.

5.4 NON-POTABLE (RECYCLED) WATER SYSTEM

Currently, BCVWD has over 44 miles of non-potable water transmission and distribution system in place. The backbone transmission system forms a loop around the City of Beaumont and is comprised of primarily 24-in diameter cement mortar lined, ductile iron pipe, all installed after year 2000. The system includes a 2 million-gallon recycled (non-potable) water reservoir which provides gravity storage for the system. As shown in **Table 5-1**, presented previously, at the end of 2019, there were approximately 309 connections delivering 1,547 AFY of non-potable water. There are three major non-potable water pressure zones (2800 Zone, 2600 Zone and 2520 Zone); potentially there could be two additional pressure zones (3040 Zone, 2370 Zone).

A 2 MG non-potable reservoir, (2800 Zone Non-potable Water Tank), has been constructed at the BCVWD Groundwater Recharge Site and is piped to receive potable water or untreated SPW through air gap connections. The non-potable water system can have a blend of recycled water, imported, untreated SPW, and potable water.

The 2800 Non-potable Water Zone is currently separated from the 2600 and lower pressure zones. The 2800 Non-potable Water Zone is supplied with water from Well 26, supplemented by potable groundwater introduced into the system through an air gap at the 2800 Zone Non-potable water tank. The 2600 and lower non-potable water pressure zones are supplied with potable water through interconnections between the potable and non-potable water system. BCVWD has a capital project approved to provide fine screening to the SPW prior to entering the 2800 Zone Non-potable Water Reservoir. This project will be implemented when demands increase and/or the non-potable water system is tested and approved for recycled water use.

BCVWD is working with the City of Beaumont to secure recycled water for use in the non-potable water system. The City is under construction with expansion and upgrade of their existing wastewater treatment facility to bring it to 6 mgd capacity and will be installing a new membrane bioreactor (MBR) treatment units followed by reverse osmosis membrane treatment. A brine line from the treatment plant to the Inland

Empire Brine Line (IEBL) in San Bernardino is also under construction. A memorandum of understanding (MOU) between BCVWD and the City for recycled water purchase and use was signed in July 2019 and the City and BCVWD are in the process of finalizing an agreement for purchase of recycled water through an ad-hoc committee of City Council members and BCVWD Board Members.

The Regional Water Quality Control Board (RWQCB) has ordered the City to be in compliance with the maximum benefit provisions, which include providing recycled water for beneficial use, by March 1, 2020. Construction completion has been delayed due to wet weather and the Covid-19 virus shutdown.

When the demand for recycled water for landscape irrigation is less than the supply available, BCVWD may ultimately recharge the surplus recycled water at BCVWD's groundwater recharge facility or some alternative facility with appropriate treatment and permits. Recycled water use and recharge is permitted by the Adjudication.

6. UPDATED WATER DEMANDS IN SAN GORGONIO PASS AREA

In 2018, BCVWD developed a series of White Papers (White Papers No. 1 through 7) that looked at water supply, water demands, current and future water supply costs, funding requirements and funding strategies considering both BCVWD's service area and the SGPWA as a whole. These White Papers were presented at BCVWD Board Meetings and elsewhere. The purpose of the White Papers was to assess the water supply situation vis-à-vis the growth in demand. The results of this series of White Papers indicated that the regional imported water demands in BCVWD's 2015 UWMP and the SGPWA 2015 UWMP may be overstated, primarily because of over-aggressive growth in demand, limited consideration of recent state-mandated conservation and indoor water use requirements, etc.

6.1 REGIONAL WATER SUPPLY AND DEMAND SPREADSHEET MODELS

BCVWD, in cooperation with the other major retailers, developed a Regional Water Demand Spreadsheet or Workbook which included a separate worksheet for each of the three major retailers in the SGPWA service area: BCVWD, City of Banning, and Yucaipa Valley Water District (YVWD)/City of Calimesa. The other water supply agencies, e.g., Cabazon Water District, High Valleys Water District, etc. that are not currently receiving imported water from SGPWA were also included, based on data in SGPWA's 2015 UWMP.

The spreadsheet model allows the water agency to input (and adjust):

- New EDU Water Demand, AFY/EDU
- Existing EDU Water Demand, AFY/EDU
- Infill EDUs/year
- Commercial & Institutional EDUs/year, as a % of Residential EDUs
- Commercial & Institutional EDUs, Minimum EDUs/yr.
- Water Conservation, % Reduction on Existing Demands
- Water Conservation, % Reduction on New Demands
- 2017 Year Ending Potable Water Demand, AF
- Beaumont Basin Groundwater Storage Account Maximum, AF
- Beaumont Basin Groundwater Storage Account 2017 Ending Balance, AF

The demand worksheets included the major development projects in each of the retailer's service area, based on data in specific plans, water supply assessments, regional water resource planning studies, and other sources. The spreadsheets allow the water supply agencies to input their own development rates, on a year by year basis, to adjust anticipated housing startups, build-out years for large developments, and the amount of in-fill development and commercial/institution development; adjust unit water demands for new and existing housing, and account for any anticipated conservation for new and existing demands, among other items. Each water supplier could adjust their imported water banking requirements and evaluate the impact of their strategies on their own Beaumont Basin storage accounts over time.

The spreadsheet provides a graph of the agency's annual groundwater storage account balance which is automatically updated with any input change. The purpose is to allow the agencies to model, on a year by year basis, various imported water purchase and banking strategies vis-à-vis available imported water

from SGPWA. Adjustments can be made to water demands using conservation factors on new and existing (older) housing units; water supply sources can include groundwater, recharged recycled water (indirect potable reuse), and captured storm water.

Beaumont Basin Watermaster's redistribution of unused overlie rights and forbearance water are included in the model.

The worksheets were reviewed by the retail water agency managers for reasonableness of growth taking into account the housing market and absorption capacity of the Pass Area. These spreadsheets, and the criteria are summarized below but are described in detail in White Paper No. 6.

Separate spreadsheet models have been developed for:

- BCVWD
- City of Banning, including Banning Heights Mutual Water Company, High Valleys Water District
- YVWD (Summerwind Ranch and Mesa Verde Area)
- All combined

6.1.1 CITY OF BANNING

Major development projects in the City of Banning which are included in the Regional Spreadsheet Model are shown in **Table 6-1**.

Table 6-1. Major Development Projects in City of Banning

Project Name	Projected EDUs	Estimated Start-up Year	Build-out Years
Butterfield Ranch	4,862	2020	30
Rancho San Gorgonio	3,385	2019	17
Diversified Pacific	98	2021	5
St. Boniface	171	2023	10

Butterfield Ranch (now Atwell by Pardee) was projected to start in 2015 and extend for 30 years to buildout in 2045 per the Project's Water Supply Assessment (WSA). The project recently started grading operations and will likely have homes ready in late 2020. There are 4,862 EDUs proposed, or an average of 160 EDUs per year over the 30-year build-out period. Rancho San Gorgonio is planned for 3,385 EDUs and initially projected to start in 2017 and be fully built out by 2034 (17 years) per the Project's WSA (about 200 EDUs per year average over the build-out period). This project has not yet started and probably will not start until after 2022.

The spreadsheet for Banning included two other projects:

- Diversified Pacific (98 EDUs)
- St. Boniface (171 EDUs)

Specific years when these projects are to begin were not stated, nor were the buildout years. The spreadsheet assumes 2021 and 2023, respectively, for starting and build out years of 5 and 10 years, respectively.

In the development of the spreadsheet model for the City of Banning, the San Gorgonio Integrated Regional Water Management Plan (SGIRWMP), May 2, 2018 (Revised August 1, 2018) was analyzed in addition to the City's 2015 UWMP. The SGIRWMP covered the SGPWA service area generally east of Highland Springs Avenue. The SGIRWMP integrated three separate studies:

- Water Supply Reliability Study
- San Gorgonio Region Recycled Water Study
- San Gorgonio Integrated Watershed and Groundwater Model Technical Memorandum

The City of Banning has firm groundwater supplies from the Banning Storage Unit, Banning Bench Storage Unit, Cabazon Storage Unit, and Banning Canyon Storage Unit totaling 9,675 AFY (2015 UWMP).

In addition, in accordance with the Adjudication, the City of Banning is entitled to 31.43% of the unused overlier pumping rights in the Beaumont Storage Unit. Watermaster developed estimates for years 2018 through 2022 and are included in the spreadsheet. The amount of unused pumping rights varies from year to year, depending on hydrologic conditions and other factors, and is evaluated by Watermaster annually. The 2017 Annual Watermaster Report indicates that Banning's reallocated unused overlier pumping amount for 2020 is 1,450 AFY, slightly more than that reported in the City's 2015 UWMP. As some of the overlying parties develop their properties, the overlier rights will be used by the potable water and recycled water supplying agency and will no longer be available for reallocation. As a result, the total amount subject to reallocation will decrease over time. BCVWD made an estimate of the unused overlier pumping rights under a "developed" or "build-out" condition and estimated the total unused overlier amount would be 1,800 AFY under full buildout. The City of Banning's share (31.43%) would be 560 AFY (rounded) at buildout. The spreadsheet allows for the gradual reduction of the unused overlier pumping rights over time. It is projected by BCVWD to decrease to 560 AFY by 2030 or so as the overlying properties develop.

The City of Banning has 51,961 AF banked in their Beaumont Basin Storage account at the end of 2017 per Watermaster. At year-end 2018, the annual storage had increased to 52,320 AF. For the period 2008 through 2017, the City of Banning has recharged an average of 1,294 AFY of SPW in BCVWD's recharge facility. The City can store up to 80,000 AF.

Table 6-2 presents a summary on the Supply-Demand Spreadsheet Model for the City of Banning. The year 2040 data was projected from previous years since the model currently only extends to 2035.

Table 6-2 was based on the following criteria:

- 2017 Ending Potable Water Demand: 7,500 AFY
- New EDU water demand: 0.52 AFY/EDU
- Existing EDU water demand: 0.62 AFY/EDU
- No demand reduction due to conservation on either existing or new EDUs

This was reviewed by the City of Banning. **Table 6-2** indicates that the City of Banning has adequate local supply until 2035. Note that Banning's Beaumont Basin Groundwater Storage Account is full in 2030. (Per

the spreadsheet model it actually fills in 2027). This indicates that the City of Banning has minimal imported water needs from SGPWA until 2040.

Table 6-2. Summary of Spreadsheet Supply-Demand Model for City of Banning

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year		218	388	706	220	220
Potable Water Demand, AFY	7,504	7,678	8,406	9,902	10,832	11,400
Banning/Cabazon Groundwater, AFY	9,675	9,675	9,675	9,675	9,675	9,675
Beaumont Reallocated Overlier Rights, AFY	2,001	1,450	1,100	600	560	560
Total Local Supply, AFY	11,676	11,125	10,775	10,275	10,235	10,235
Surplus/(Deficiency)	4,172	3,447	2,369	373	(597)	(1,165)
Imported Water, AFY						1,000
Groundwater Storage Account, AF	56,133	63,100	77,573	80,000	78,415	76,510

6.1.2 YVWD/CITY OF CALIMESA

Major development projects in the YVWD service area within SGPWA (principally the City of Calimesa) which are included in the Regional Spreadsheet Model are shown in **Table 6-3**.

Table 6-3. Major Development Projects in YVWD in SGPWA (City of Calimesa)

Project Name	Projected EDUs	Estimated Start-up Year	Build-out Years
Summerwind Ranch	3,841	2019	20
Mesa Verde	3,650	2022	20
JP Ranch (a)	500	2025	10

(a) Per BCVWD discussions with J. Zoba, General Manager, YVWD.

To develop the spreadsheet for YVWD, several references were reviewed for YVWD's water supply and projected demands within their service area lying within the SGPWA boundaries:

- 2015 SGPWA UWMP
- 2015 San Bernardino Valley Regional UWMP
- Mesa Verde Water Supply Assessment (WSA) – Draft August 11, 2017
- YVWD Strategic Plan for Sustainable Future (Adopted August 20, 2008)

The EDUs for Summerwind Ranch and Mesa Verde were taken from the Specific Plans for these projects. Grading for street and utility work and model construction is underway for Summerwind Ranch, with first homes coming “on-line” sometime in 2019. Mesa Verde is estimated to start in 2022. An estimated 20-year build-out time for Summerwind Ranch and Mesa Verde was assumed, resulting in an average of 192 and 183 EDUs per year, respectively. Per YVWD, future phases of JP Ranch will likely not start until 2025 with a 10-year build-out period (about 50 EDUs per year). It should be noted there will be additional EDUs associated with the developments for related commercial and retail developments, schools, parks, restaurants, etc.

Water supply sources for these projects are:

- Reallocated unused overlie pumping rights in the Beaumont Basin
- Oak Valley Partners’ earmarked transfer right
- Banked groundwater from storage
- Imported Water from SGPWA
- Treated potable water from the YVWD’s Regional Water Treatment Plant

In accordance with the Adjudication, YVWD’s share (13.58%) of the reallocated unused overlie pumping right was determined by Watermaster for 2018 through 2022 and reported in the 2017 Watermaster annual report. To project the amount available under more long-term conditions, BCVWD made an evaluation of a fully developed condition of the developable overlie parcels as shown on the worksheet in the spreadsheet. YVWD’s share will be about 240 AFY (rounded).

Both Mesa Verde and Summerwind Ranch are part of the original Oak Valley Development that started with the Landmark Land Company of California in the 1980s. The original Landmark Project was a master planned golf/recreational development. Oak Valley Partners (OVP) took over the project and were involved in the Beaumont Basin Adjudication. OVP has overlying groundwater rights in the Beaumont Basin [originally 1,806 AFY but reduced to 1,398.9 AFY (round to 1,399 AFY), after the safe yield was reduced in 2014]. These overlie groundwater rights will be transferred to YVWD to serve the Summerwind Ranch Development only per YVWD.

YVWD uses 700 gal/day/EDU (0.78 AFY/EDU) for total water demand for existing EDUs; but requires all new development to be dual-plumbed and requires the use of recycled water outside. Potable water demands are estimated by YVWD to be 40% of the total water demand, i.e. 280 gal/day/EDU (0.37 AFY/EDU) with the remainder, i.e., 420 gal/day/EDU to be recycled water.

YVWD has groundwater banked in the Beaumont Basin; at the end of 2017, per Watermaster, the amount in storage was 15,776 AF. This had grown into 16,633 AF by the end of 2018. YVWD has a 50,000 AF storage account.

The following Table (Table 6-4) was extracted from the Mesa Verde WSA. The Mesa Verde WSA indicates 1,200 AFY is proposed to be recharged (banked) by YVWD from 2020 through 2040. YVWD developed a Strategic Plan for a Sustainable Future, The Integration and Preservation of Resources for a Sustainable Future (adopted August 2008) which identified a groundwater banking program for future reliability for droughts and disruption in the SPW supply as shown in Table 6-4. The Plan indicates a

Board Policy of banking of 15 percent of the total water supply used by the YVWD's customers. Data was not available to confirm the 1,200 AFY in **Table 6-4**; but 1,200 AFY is used in the spreadsheet model.

The total of the drinking water demands for the Water Filtration Facility plus the Conjunctive Use Demands match with the projected imported water demands in the SGPWA 2015 UWMP as shown in **Table 3-1** presented previously.

Table 6-4. YVWD SGPWA Imported Water Demands

Imported Water Demands from the San Geronio Pass Water Agency (Acre-feet)	2015	2020	2025	2030	2035	2040
Drinking Water Demands:						
Yucaipa Valley Water Filtration Facility	454	609	767	962	1,191	1,444
Conjunctive Use Demands -Local Water Banking	0	1,200	1,200	1,200	1,200	1,200
New Development Long-Term Supply - Sustainability Program	0	2,504	3,040	3,596	4,344	3,407
Purchase from SGPWA	454	4,313	5,007	5,758	6,735	6,051

Source: Mesa Verde Project WSA Draft August 11, 2017, page 25

Table 6-4 also identified “New Development Long-Term Supply—Sustainability Program which relates to YVWD’s Strategic Plan for a Sustainable Future, mentioned above. YVWD requires all new developments to provide funding to secure 7.0 AF of supplemental imported water per EDU. This amount of water is sufficient to meet the drinking water demands generated by each new EDU for a period of 20 years. YVWD also offers a Crystal Status Development Program whereby the developer provides funding for 15.68 AF of supplemental imported water per EDU which is sufficient to meet the potable and non-potable (recycled) water demands of the new EDU for 20 years. The difference between the two programs is that under the standard (7.0 AF/EDU) program, development will be restricted (i.e., no grading or building permits will be issued), when a Stage 2 water shortage is declared (10% cutback). However, Crystal Status Development can continue through a Stage 4 Shortage (35% cutback). The 7.0 AF/EDU will not need to be replenished for 20 years. For this spreadsheet, the Standard 7.0 AF/EDU imported water purchase and storage is used, since it is difficult to determine how many new developments will purchase Crystal status. This is conservative.

The spreadsheet assumes that 7.0 AF/EDU will be applied to all new developments (Mesa Verde and JP Ranch) in YVWD, except for Summerwind Ranch, which has overlieer pumping rights available to meet its projected demands.

Table 6-5 presents a summary on the Supply-Demand Spreadsheet Model for YVWD in the SGPWA service area, i.e., principally the City of Calimesa. Year 2040 data was projected from previous years since the model currently only extends to 2035.

Table 6-5 was based on the following criteria:

- 2017 Ending Potable Water Demand 500 AFY
- New EDU water demand: 0.37 AFY/EDU
- Existing EDU water demand: 0.78 AFY/EDU

- Water demand reduction from conservation on new EDUs: 10%
- Water demand reduction from conservation on existing EDUs: none

Table 6-5 indicates that YVWD, in SGPWA service area has sufficient local supply to meet demands until 2025 at which time imported water will be needed unless YVWD plans on withdrawing water from their storage account. The YVWD Beaumont Basin Groundwater Storage Account is full in 2030 primarily because of the “Sustainability Water” which is banked. YVWD’s total imported water demands reported in the Mesa Verde WSA differs from YVWD’s imported water demands in the SGPWA 2015 UWMP presenter earlier.

Table 6-5. Summary of Spreadsheet Supply-Demand Model for YVWD (City of Calimesa)

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year		83	464	551	551	500
Potable Water Demand, AFY	503	544	1,065	2,054	3,058	4,062
Oak Valley Partners Earmark Transfer, AFY	3	50	586	1,399	1,399	1,399
Beaumont Reallocated Overlier Rights, AFY	864	627	400	240	240	240
Total Local Supply, AFY	867	677	986	1,639	1,639	1,639
Surplus/(Deficiency)	364	133	(79)	(415)	(1,419)	(2,423)
Imported Water for Regional Filtration Facility, AFY (a)	500	609	767	962	1,191	1,444
Imported Water for Banking, AFY (a)		1,200	1,200	1,200	1,200	1,200
Imported Water for Sustainability, AFY	49	51	1,655	2,260	2,260	2,260
Total Imported Water, AFY	549	1,860	3,622	4,422	4,651	4,880
To (From) Storage, AFY	913	1,993	3,542	4,007	3,232	2,457
Groundwater Storage Account, AF	16,689	19,397	32,825	50,000	50,000	50,000
(a) Source: YVWD's Mesa Verde WSA, pg. 25, SGPWA SPW or equivalent used at Filtration Plant						

6.1.3 BCVWD

CITY OF BEAUMONT DEVELOPMENT

Major development projects in the BCVWD service area which are included in the Regional Spreadsheet Model are shown in **Table 6-6**. The projected EDUs planned or yet to be built are estimated and may vary slightly from City of Beaumont Project Status Report estimates.

Table 6-6. Major Development Projects in Planning or Construction Stages

Project Name	Projected EDUs (Planned or Yet to be Built End 2017)	Estimated Start-up Year	Build-out Years
Tournament Hills Ph 4	281	2020	4
Sundance ^(a)	1,262	2018	5
Fairway Canyon ^(a)	1,810	2019	20
Heartland Olivewood ^(a)	1,081	2018	20
Four Seasons ^(b)	203	2018	3
Kirkwood Ranch	391	2022	12
Potrero Creek Estates	700	2025	10
Noble Creek Meadows	648	2021	15
Hidden Canyon Industrial ^(a)	82	2019	5
Sunny Cal Egg Ranch	529	2019	10
Jack Rabbit Trail ^(c)	2,000	2030	25
The Preserve/Legacy Highlands	3,218	2025	25
Taurek	244	2022	20
TR 32950 Manzanita	95	2022	10
Other Projects on City of Beaumont's Project Status List (10/18/2018)			
Sundance Corporate Center ^(a)	---	2018	2019
Rolling Hills Ranch Industrial Ph 2 ^(b)	---	2020	2021
Centerpointe Commercial ^(b)	---	2018	2019
San Gorgonio Village Ph 2 ^(a)	---	2020	2021
Total EDUs	12,545		
(a) Under construction (b) Recently completed (c) Jack Rabbit Trail Project may change from residential to commercial/industrial			

Figure 6-1 shows the number of single-family home building permits issued in the City of Beaumont for the years 2000 through 2019. Although not shown in the Figure, the permit applications started to increase in 1999-2000 and reached their peak in 2005 with 2,300 new home permits issued for that year. The number of permits for new homes declined to a low of 169 in 2011. Over the last 10 years, permits averaged 455 per year, and 577 over the last 5 years. The 19-year average was 684 per year. Future growth will likely be in the range of 450 to 650 permits per year, although some developers have projected slightly higher amounts in their build-out forecasts. It should be noted that not all Single-Family Permits in a given year turn into “occupancy” during that year.

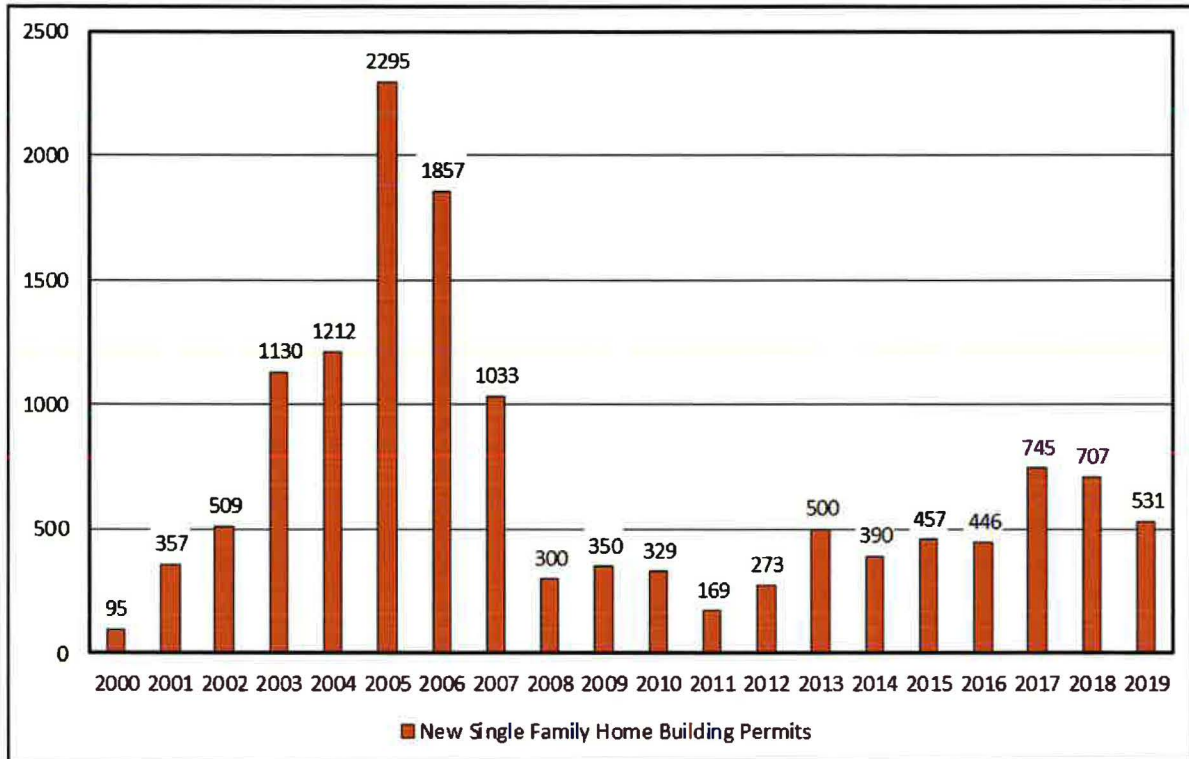


Figure 6-1. City of Beaumont Single Family Home Permits

The EDUs in **Table 6-6** total 12,545; at the rate of 480 to 500 EDUs/year, it would take about 25 years to construct these units or about 2040 or slightly beyond.

CHERRY VALLEY GROWTH AND DEVELOPMENT

The ultimate build-out population for that portion of Cherry Valley served by BCVWD, based on the Pass Area Land Use Plan densities, was estimated to be 21,700 people or about 7,750 EDUs. This was BCVWD’s estimate in 2009, developed by BCVWD, using GIS land use data from Riverside County and typical development densities for the various land uses in the General Plan. The 21,700 people included 6,736 people in the City of Calimesa. BCVWD will not be serving the City of Calimesa as this is within YVWD’s service area. As a result, the 21,700 population estimate, to be served by BCVWD, may be overestimated, BCVWD now believes it to be closer to 15,000 people at build-out, or about 5,350 EDUs.

The build-out population is based on an increase from 2.43 persons per EDU, currently, to 2.8 persons per EDU projected at build-out.

There were 2,874 housing units in Cherry Valley in 2010 per the census data, but 26.6% of those are mobile homes. Adjusting for the reduced water use in mobile homes, the 2,874 housing units are equivalent to approximately 2,485 EDUs. The Sunny Cal Egg Ranch Development, (529 EDUs from **Table 6-6** above), is included with the City of Beaumont's development projects, but is within the current Cherry Valley census area. The 529 Sunny Cal EDUs would have been included in the projected 2,865 EDU increase for Cherry Valley, (5,350 EDUs – 2,485 EDUs). To avoid "double counting EDUs," the Sunny Cal Egg Ranch EDUs were deducted from the 2,865 EDUs, resulting in a net projected 2,336 EDU increase for Cherry Valley to build-out. The buildout population and EDUs will be revised in future updates of the BCVWD Potable Water Master Plan and UWMPs.

BCVWD has determined that Cherry Valley will likely be growing at a low rate keeping with its character of residential rural community; growth rate is estimated to be less than 10 EDUs/year until the City of Beaumont's currently planned projects are developed. Once the City of Beaumont has developed, Cherry Valley will likely begin to be developed at a gradually increasing rate, perhaps increasing to 30 to 50 EDUs/year; but this is not expected to occur until after 2040.

Table 6-6 shows Jack Rabbit Trail as 2,000 EDUs; the current proposed development concept by a developer is to construct major commercial/industrial buildings with a resulting reduction in EDUs. However, this is uncertain, and plans could change. For planning purposes for water supply, Jack Rabbit Trail is assumed to be 2000 EDUs until firmed up by the City of Beaumont.

SUPPLY AND DEMAND MODEL FOR BCVWD

Table 6-8 presents a summary of the spreadsheet model for BCVWD's demand which was based on the following criteria:

• 2017 Ending Potable and Non-potable Water Demand:	12,981AFY
• New EDU water demand:	0.546 AFY/EDU
• Existing EDU water demand:	0.62 AFY/EDU
• Water demand reduction from conservation on new EDUs:	5%
• Water demand reduction from conservation on existing EDUs:	5%

BCVWD's source of supply consists of:

- **Edgar Canyon (Little San Gorgonio Creek) Groundwater.** The annual yield for Edgar Canyon is based on 37 years of pumping records. The average annual production for the period 1983 – 2019 was 2,094 AFY, which was rounded to 2,100 AFY in the spreadsheet. However, for 2018, the production was reduced to 1,700 AFY to account for the reduced production in some wells due to reduced pump efficiency. These pumps have recently been refurbished and are fully operational. They will be refurbished on a regular basis from now on.
- **Beaumont Basin**
 - **Reallocated Unused Overlier Pumping Rights** – Watermaster provided the amount of reallocated overlier rights in the 2017 Draft Annual Report for each year up to 2022. BCVWD was allocated 2,706 AF in 2018 and 1,962 AF in 2020. Thereafter, BCVWD

made an estimate based on production and development of the overlies' property. BCVWD estimated the long-term, fully developed, unused overlying party pumping rights would be about 1,800 AFY. BCVWD gets 42.51% of the unused overlier pool each year. At full development, BCVWD estimates its share is 760 AFY.

- **Forbearance Water** is credited to a water supplier by Watermaster for any potable and/or recycled water provided to an overlier when the overlier's property develops. The overlier forbears pumping the equivalent amount of water supplied. BCVWD will be supplying the Sunny Cal Egg Ranch Development with both potable and recycled water at some point. Sunny Cal Egg Ranch and associated partners are overlying parties and have pumping rights. BCVWD estimates that fully developed demand from recycled and potable water is about 340 AFY. The amount of forbearance water will increase over time from zero AFY to 340 AFY as the project develops to anticipated buildout in 2030.
- **Water from Groundwater Storage** – BCVWD has an 80,000 AF storage account in the Beaumont Basin. As of the end of 2017, there were 32,296 AF in storage per Watermaster's 2017 Annual Report. The amount in storage increased to 34,794 AF at the end of 2018. BCVWD's plan, which is shown in BCVWD's 2015 UWMP, envisions banking from 1,000 AFY to 2,500 AFY to drought proof BCVWD. This is accounted for in the spreadsheet each year. Should there be a year when the projected amount cannot be delivered by SGPWA, any deficiency will be made up in successive years when adequate supply is available. **Table 6-8** shows that for average water supply conditions, banking is anticipated every year and no water will be withdrawn from storage.

Table 6-8. Summary of Spreadsheet Supply-Demand Model for BCVWD

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Total New EDUs/year	381	580	460	552	458	297
Potable and Non-potable Water Demand, AFY	13,129	13,668	14,841	16,032	17,192	18,100
Edgar Canyon, AFY	1,700	2,100	2,100	2,100	2,100	2,100
Beaumont Reallocated Overlier Rights, AFY	2,706	1,962	1,200	760	760	760
Forbearance Water (Sunny Cal Egg Ranch), AFY	0	50	200	340	340	340
Recycled Water City of Beaumont, AFY	0	0	2,188	2,840	3,487	3,930
Stormwater Capture, AFY	0	0	250	250	250	250
Other Local Water Resource Projects, AFY	0	0	250	250	250	250
Total Local Supply, AFY	4,406	5,668	6,188	6,540	7,187	7,630
Surplus/(Deficiency), AFY	(8,723)	(8,000)	(8,653)	(9,492)	(10,005)	(10,470)
Imported Water for Replenishment, AFY	8,723	8,000	8,653	9,492	10,005	10,470
Imported Water for Drought proofing, AFY	1,000	1,000	2,000	2,500	2,500	2,500
Total Imported Water, AFY	9,723	9,000	10,653	11,992	12,506	12,970
To (From) Storage, AFY	1,000	1,000	2,000	2,500	2,500	2,500
Groundwater Storage Account, AF	33,296*	35,296	41,296	51,796	64,296	76,796

* 2018 Groundwater Storage Account Volume in Table 6-8 is estimated. The actual is 34,794 AF

- Recycled Water from the City of Beaumont** – The City of Beaumont was required by Regional Water Quality Control Board (RWQCB) Order No. R8 -2015-0026 to have recycled water put to beneficial reuse by March 1, 2020. The City started the construction of the new wastewater treatment plant, reverse osmosis desalting unit, and the required brine line from the wastewater treatment plant to the Inland Empire Brine Line (IEBL), in San Bernardino. The City has completed Title 22 Engineering Report for the new Treatment Facilities which is under review by the RWQCB and CDDW. BCVWD's water supply is premised on the basis that 1.8 mgd habitat mitigation, previously negotiated with U.S. Fish and Wildlife in 2008, will not change. The City and BCVWD signed a Memorandum of Understanding (MOU) in July 2019 which will form the basis for an agreement on the sale and reuse of recycled water from the new treatment plant. The City and BCVWD are in the process of developing a recycled water purchase agreement. BCVWD and the City are working jointly on coordinating the pumping and storage requirements at the treatment plant. The City will be the recycled water producer; BCVWD the distributor. BCVWD is in process of completing their Title 22 Engineering Report for the Distribution and Reuse Applications. BCVWD has developed draft rules and regulation for recycled water use and developed a cross-connection testing and control plan which has been previously approved by the CDDW. However, that was some time ago and BCVWD

will be submitting the draft rules and regulations again, in the event there have been some changes in the requirements. At this time, recycled water is assumed to only be used for non-potable uses and to be available in 2021. In the future, as more recycled water becomes available during the late fall, winter, and early spring, BCVWD anticipates developing, with the City, an advanced treatment facility and secure permits for groundwater recharge of the surplus effluent. BCVWD and City anticipate providing recycled water to the Oak Valley Greens and/or Tukwet Canyon Golf Courses in exchange for forbearance water which will increase BCVWD's potable water supply.

The BCVWD spreadsheet model is based on 0.25 AFY/EDU (225 gallons/day/EDU) connected to the City's wastewater system. The City is obligated to maintain a 1.8 mgd discharge to Cooper's Creek for habitat maintenance; the available recycled water accounts for this 1.8 mgd "loss." A capacity factor 75% is applied to the available wastewater to account for brine discharge, recycled water used on the plant site for maintenance, and water contained in the biosolids, hauled off-site. This results in a net 0.20 AFY of recycled water generated per EDU.

- **Storm Water Capture** – BCVWD and Riverside County Flood Control and Water Conservation District (RCFC&WCD) are jointly working on a Santa Ana Watershed Project Authority (SAWPA) Grant Project to design and construct Beaumont MDP-Line 16 storm water capture project, also known as the Grand Avenue Storm Drain in Cherry Valley. The project is partially funded under the Integrated Regional Water Management Implementation Grant Program under Proposition 84. A detailed analysis of the runoff potential was performed using 77 years of daily rainfall records from the Beaumont Rain Gage with the runoff determined for each storm using the Natural Resources Conservation Service (NRCS) curve number method. An estimated 200 to 230 AFY can be captured with MDP-Line 16 project. Other projects, in and around the BCVWD recharge facility, will capture excess flow in both Brookside Ave. and Beaumont Ave. to increase the annual capture (long term average) to 250 AFY, perhaps more. The MDP-Line 16 is in the final stages of design with construction to start in 2021.
- **Other Local Water Resource Projects** – BCVWD has several other local water resource projects which can be implemented including:
 - High nitrate groundwater at the mouth of Edgar Canyon. This groundwater can supplement the recycled water/non-potable water system flow in the summer, high demand months, making well water available for potable water use. BCVWD believes as much as 300 AFY can be captured and reused.
 - San Timoteo Canyon Extraction Wells to capture groundwater from the Beaumont Basin flowing into San Timoteo Canyon and also to capture City of Beaumont wastewater flow discharged to Cooper's Creek once the water has percolated and is no longer available for habitat maintenance. It is estimated that 400 to 800 AFY can be captured and put into the recycled water/non-potable water system to meet summertime demands. High groundwater has been observed along Oak Valley Parkway in the vicinity of Palmer Drive and was encountered in the construction of the City's brine line. This water be captured and used to supplement the recycled water during the high demand summertime.
 - for purposes of this WSA, 250 AFY are assumed to be available with the initial phases of these projects.
- **Imported Water from SGPWA** -- The amount of imported water which BCVWD is able to purchase and recharge is only the amount left over after YVWD, the City of Banning, and others have purchased the amount each needs to meet their demands and banking. The amount available from

the SGPWA collectively is discussed later in this WSA. BCVWD has entered into an agreement, and participated financially, with the SGPWA for a share of the yield from the Sites Reservoir Project. This is discussed later in this WSA.

6.2 SUMMARY OF MEMBER AGENCY IMPORTED WATER DEMANDS ON SGPWA

Table 6-9 presents a summary of the spreadsheet model demands for the City of Banning, YVWD/Calimesa, and BCVWD from **Tables 6-2, 6-5 and 6-8** presented previously. The imported water demands include from 4,792 to 7,912 AFY for banking and drought proofing. **Table 6-9** also includes a projected amount of imported water for member agencies in SGPWA that are not currently taking SPW. These amounts were taken from SGPWA's 2015 UWMP. BCVWD believes these amounts are very conservative considering the growth rates in the Pass Area.

Table 6-9. Regional Summary of Spreadsheet Supply-Demand Model for SGPWA

Demand or Supply	Year					
	2018	2020	2025	2030	2035	2040
Potable Water Demand, Banning YVWD/Calimesa, BCVWD (Potable and Non-potable), AFY	21,135	21,890	24,312	27,987	31,083	33,562
Local Supply, Banning YVWD/Calimesa, BCVWD, AFY	16,949	17,470	17,949	18,454	19,061	19,404
Imported Water Demand, incl. drought proofing, etc., AFY	10,272	10,860	14,274	16,414	17,157	18,950
Total Imported and Local Supply, AFY	27,221	28,330	32,223	34,868	36,218	38,354
Total to (from) Regional Groundwater Storage, AF	6,085	6,440	7,912	6,881	5,135	4,792
Regional Groundwater Storage, not incl. SGPWA, AF	106,118	117,793	151,694	181,796	192,711	217,529
SGPWA Imported Water Demands for those agencies not currently taking imported water, from SGPWA 2015 UWMP, AFY		500	1,600	2,800	3,900	5,000
Total Imported Water Demand, AFY	10,272	11,360	15,874	19,214	21,057	23,950
Total Imported Water Demand, without banking or drought proofing, AFY	9,223	9,109	11,019	13,254	15,097	17,914

7. SGPWA AVAILABLE IMPORTED WATER

At the present time, (2020) the “firm” supplies of imported water available to SGPWA, (or in the final stages of being finalized), between now (2020) and 2040 are:

- Table A
- Yuba Accord Water
- SBVMWD (agreement is in final stages of development)
- AVEK (Nickel Water)
- Ventura/Casitas Water Lease/Purchase (exchange agreements are currently being executed on a year by year basis)
- Delta Conveyance Project (DCP) [formerly California Water Fix (CWF)]
- Sites Reservoir (Sites)
- Purchase of State Water Project Contractors Incremental Delta Conveyance Facility Reliability Benefits
- Purchase or Leasing of Metropolitan’s Delta Conveyance Project Phase 2 Water, if available
- Other Sources available through SWP such as Article 21 Water and Turn-back Pool Water

These are discussed in White Paper No. 6, but reiterated here.

7.1 STATE WATER PROJECT (SWP) TABLE A

SGPWA’s contract with the Department of Water Resources (DWR) states a Table A amount of 17,300 AFY. Table A is the maximum amount of water the SGPWA can convey through the SWP facilities. This amount of water is not available consistently every year. In fall of each year, DWR provides an initial delivery allocation as a percent of Table A depending on amount of water in reservoir storage and anticipated hydrologic conditions. The allocation can be increased or decreased depending on the precipitation during the winter; a final allocation is usually issued in spring and sets the amount of water available, as a percentage of Table A, from the SWP. Since 1992, the allocation has averaged about 65%. DWR has prepared a reliability study (DWR - State Water Project Delivery Reliability Report 2011. State of California Dept. of Water Resources, June) which indicated the SWP can deliver only about 62% of Table A (10,726 AF to SGPWA) in any one year. Table B-5B, in DWR’s Bulletin 132-17, forecasts the amount of SPW delivered to SGPWA in future years at 10,380 AFY (60% reliability). For consistency purposes 10,380 AFY is the amount which SGPWA can rely on at the present time.

In the discussions over the Delta Conveyance Project DCP, experts believe the current SWP reliability of about 62% will decrease over time to 48%, or possibly even lower, due to anticipated additional regulatory constraints to protect threatened and endangered fish within the Delta. The length of time over which this decline in reliability will occur is not certain, but to be conservative, it is assumed that by 2035, the SWP reliability will decrease to 48%. Implementation of CWF by 2030 to 2035 will restore reliability and possibly even increase it above the current 60% to 62% reliability.

For planning purposes in this WSA, the SWP delivery reliability is assumed to decline at rate of linearly from 2018 to 2035. Therefore, by the year 2035, with a delivery reliability of 48%, the SGPWA can expect only about 8,300 AFY from the SWP. Once the DCP is in place, the reliability will be restored, and, perhaps be slightly improved, over its current 62% reliability.

7.2 YUBA ACCORD WATER

Through the Yuba Dry Year Transfer Program, the official name for Yuba Accord Water, SGPWA can purchase additional supplemental water from Yuba County Water District under an agreement. (DWR - 2008 Agreement for the Supply and Conveyance of Water by the Department of Water Resources for the state of California to the Participating State Water Contractors under the Dry Year Water Purchase Program, March 31) The amount of water available from the Yuba Accord varies year to year depending on hydrologic conditions. Yuba Accord Water has only been available, for purchase by SWCs, since about 2009. There are delivery "losses," (termed "carriage cost" in DWR's Bulletin 132 series), in the Delta. The amount is typically assumed by DWR to be 20% of the delivered amount, adjusted as needed based on water quality considerations, plus another 2 to 3% Delta Conveyance "loss." Records in the Bulletin 132 series indicate that SGPWA purchased Yuba Accord Water in four years since 2009 although Yuba Accord Water was available every year from 2009 through 2015 except 2011. Purchases by SGPWA averaged 374 AFY, with deliveries averaging 280 AFY (25% loss).

The amount of Yuba Accord Water available depends on the calculated Sacramento Valley Water Year Index. Between 75,000 AFY (Dry Years) and 140,000 AFY may be available depending on the Water Year Index. If all 22 SWCs decide to participate in a given year, SGPWA's share of the Accord Water is 0.21%, based on the proportion of SGPWA's Table A and the Total Table A of all 22 participants. If some SWCs do not want to participate in a given year, the allocation to each SWC is adjusted upward. SGPWA would normally get 158 AFY during a dry year and a maximum of about 294 AFY.

The SGPWA estimates that about 300 AFY, on the average, of Yuba Accord Water can be obtained. For purposes of this WSA, a conservative 30% total loss is assumed, which will reduce the amount that can be actually delivered to the Pass Area to 200 AFY. This is reasonable considering the past experience.

7.3 SAN BERNARDINO VALLEY MUNICIPAL WATER DISTRICT (SBVMWD WATER)

The SGPWA Board of Directors authorized the General Manager to sign the Surplus Water Sale agreement with SBVMWD to purchase up to 5,000 AFY of SBVMWD's Table A water in years that SBVMWD's Board of Directors declares a surplus. The availability of SBVMWD surplus water depends on hydrologic and groundwater conditions within SBVMWD's service area per SBVMWD Ordinance 79. SGPWA has the right of first refusal on the first 5,000 AFY of surplus water. Assuming SGPWA exercises the right, the agreement states that SBVMWD must first offer 50% of the available supply to one or both agencies that are in both SBVMWD and SGPWA, i.e., Yucaipa Valley WD and South Mesa Water Company. Fifty percent of the water and any additional water "left over," can be offered to other SGPWA retailers. The agreement is for a term of 15 years from the date of execution (terminates in 2033), but SGPWA intends to renegotiate the terms and extend to some point in the future.

SGPWA estimates, based on past hydrologic conditions, this is likely to occur about two years out of every five, or 40% of the time. This is equivalent to 2,000 AFY in any one year. The term of this agreement will be at least 15 years from now or until about 2032. For purposes of this WSA, the amount of water available from SBVMWD is 2,000 AFY until 2032.

7.4 AVEK-NICKEL WATER

In June 2017, SGPWA Board of Directors approved an agreement with the Antelope Valley-East Kern Water Agency (AVEK) for 1,700 AFY for 20 years (to 2037) with the right of first refusal to extend it for a second 20 years. The water rights on the Kern River originally belonged to the Nickel Family, LLC that were sold to Kern County Water Agency (KCWA) and subsequently leased to other parties in various amounts. One portion (1,700 AFY) is under the control of AVEK, which offered the water to SGPWA. This water is not subject to the reliability issues of the SWP. Per the agreement, SGPWA must take all of the 1,700 AF each year or pay for 1,700 AF if the SGPWA does not take all of it in any one year.

7.5 CITY OF VENTURA AND CASITAS MUNICIPAL WATER DISTRICT (VENTURA WATER) AND OTHER EXCHANGES

The Ventura County Watershed Protection District is one of 29 State Water Contractors, but the agency lacks the infrastructure at present to be able to take its 20,000 AFY of Table A water. The County's Table A is allocated to three entities: City of Ventura (10,000 AFY), United Water Conservation District (5,000 AFY), and Casitas Municipal Water District (5,000 AFY). Up until 2018, these agencies sold their Table A water back to the "Turn-back Pool" (discussed later in this WSA). In 2018, the City of Ventura (Ventura) and Casitas Municipal Water District (Casitas MWD) entered into an agreement to exchanging Table A water with SGPWA. BCVWD understands the SGPWA is also negotiating to enact an exchange of Table A water with the City of Ventura (and Possibly Casitas MWD) for 2020, also.

The SGPWA appears to be considering extending it to a more long-term arrangement. The SGPWA Board of Directors, at the May 4, 2020 meeting, authorized the General Manager to sign the draft agreement presented at the board meeting authorized staff to complete any and all action required to document the CEQA exemption, including the filing of the Notice of Exemption, develop and execute any agreements or documentation with DWR for the one year deal.

Under the terms of the 2018 agreement, SGPWA received all of Ventura's and Casitas MWD's Table A water allocation for 2018, or 5,250 AF considering the Department of Water Resources' year 2018, final 35% allocation, (up from the original 30% in the draft agreement). SGPWA paid all of the Transportation Capital, Transportation Minimum, Conservation Capital and Conservation minimum charges. Finally, each party to the agreement would be responsible for paying the variable costs for pumping the water to their respective service areas.

The SGPWA is obligated to return 40 percent of the Table A water taken from Ventura and Casitas MWD within 10-years, no later than the end of calendar year 2028. This amount would be from SGPWA's future Table A allocation, presumably during a "wet year". Ventura and Casitas MWD must initiate the request for return of the 40%, except they may not request return in any year that DWR has a Table A allocation of 30% or less. If the Table A allocation is between 30 and 50%, the two agencies will negotiate the delivery amount for that year. If there is any "balance" remaining after the 10-year period, the two agencies and SGPWA will negotiate alternative delivery methods which could include extension of the 10-year period by five years, rolling the balance into a long-term exchange, should that develop.

The SGPWA is also considering a more long-term water transfer with a State Water Contractor for a portion of their unused SWP Table A as identified in the SGPWA's September 2018 Board discussion

related to imported water demands. Based upon information published by SGPWA, it appears that supply would potentially start at approximately 6,000 AF on an average year in 2020 and might decline to 3,500 AF in 2040 as that partner Agency utilizes more of their Table A supplies.

There is a one-year "deal" in process at present, and it is believed that the SGPWA is still pursuing a longer-term arrangement, but for purposes of this WSA, a conservative approach will be taken and no long-term arrangement will be in place.

7.6 DELTA CONVEYANCE [FORMERLY CALIFORNIA WATER FIX (CWF)]

The SWP was authorized in the Burns-Porter Act, also known as the California Water Resources Development Bond Act, passed by vote of the people in November 1960 (Proposition 1). Construction on most of the basic facilities of the SWP was completed by 1975. Due to cost considerations, and the fact that initial project water demands were lower than design capacity, a number of the originally planned facilities were "scaled down" or deferred. Many have not been constructed to date for various reasons. One of these projects was the Cross-delta Facility known as the Peripheral Canal. As a result of the scaling down and facility deferments/cancelations, the SWP is not able to live up to its original delivery capacity. A number of other facilities were scaled down, deferred, or not constructed.

The Sacramento-San Joaquin Delta Levees are vulnerable to seismic shaking; the Delta ecosystem continues to decline; flooding and saline water intrusion into the Delta impacts water quality delivered to municipal and agricultural users during dry years; climate change, short-term (50 or 100 years) or long term (500 or more years), will cause increased water levels in the Delta further stressing vulnerable levees. The SWP dams and reservoirs were designed about 50 years ago with the hydrology of the times. Climate change will impact the operation of the SWP. Precipitation—which used to fall as snow and be stored in snowpack and slowly released into streams and reservoirs, will be in the form of rain which the reservoirs were not designed to accommodate. More water will be lost to the ocean in future years because of increased runoff and less storage.

The Delta Conveyance Project (DCP), intended to address some of these issues, proposed a dual, gravity tunnel conveyance system from north of the Delta extending south to the Clifton Court Forebay. This project has been scaled back by the current governor to a single tunnel. At the southerly end of the tunnel, a new Clifton Court Pumping Facility would lift water from the tunnels into Clifton Court Forebay. The water would be pumped from Clifton Court Forebay by the State and Federal Central Valley Project pumps as they now do. Water, ranging from 3,500 to 7,500 cfs, would be diverted from the Sacramento River into the tunnel and around (below) the Delta improving water supply reliability and export water quality TDS. The cost for the DCP was anticipated to be shared 55% by the State Water Contractors and 45% by federal Central Valley Project Contractors. This allocation share may change depending on the number of State and Central Valley Project Contractor participants.

Governor Newsom has stated his support for a "one-tunnel" (DCP) in his State of the State" address, February 12, 2019, originally planned as Phase I of CWF.

The Delta Conveyance Project (DCP) is moving forward; on January 15, 2020 DWR issued a Notice of Preparation (NOP) for the environmental work on the reduced-size project which started the scoping comments phase. The comment period ended on April 17, 2020; DWR will be considering the comments

when the Environmental Impact Report (EIR) is prepared. The draft EIR is expected to be out for review and comment in early 2021.

A Delta Conveyance Project Authority has been established for the design and construction of the DCP; a Delta Conveyance Authority has been established to develop the financing. The DCP is anticipated to be funded by revenue bonds issued by the State or a Joint Powers Financing Agency with payment by State Water Contractors south of the Delta through their contracts with the DWR — extended as needed into the future. In addition to other federal, State, and local permits, DCP requires changes to water rights for the SWP and Federal Central Valley Project to authorize proposed new points of diversion and their recombination. The DCP would most likely be funded by SGPWA through their State Water Project (SWP) Debt Service taxes. White Papers No. 3 and 6 provide more details on the funding etc. The DCP is not expected to be operational until about 2035. From now until 2035, the reliability of the SWP would gradually degrade over time to 48% without the Delta Conveyance Project due to a variety of reasons as described previously in this WSA.

The original CWF with its two-tunnel approach was projected to increase the future reliability of the SWP by 14% (DWR study) to 17.62% (Metropolitan study) resulting in an increase of the overall reliability to 62% or in the best case, 65.62%. This is about or slightly above the current reliability. It is not known to what amount of reliability increase will result from the new DCP but to be conservative, it assumed the reliability will be restored to the current 60 to 62%.

Without CWF, SGPWA's reliable Table A would be 8,300 AFY (rounded, based on 48% of 17,300 AFY). The reliable Table A supply for SGPWA would increase to 10,380 AFY to 10,726 AFY at 60% and 62% reliability, respectively.

7.7 SITES RESERVOIR

Sites Reservoir is a proposed reservoir that would be located at the site of a cattle ranch in the eastern foothills of the Central Valley about 78 miles northwest of Sacramento and north of the Sacramento-San Joaquin Delta near the town of Maxwell, CA. Sites Reservoir is not on any major stream; all water must be pumped into the reservoir. Sites Reservoir was part of the original California Water Project but was deferred. The reservoir in the original project proposal would have a surface area of about 14,000 acres and store between 1.27 and 1.81 million acre-feet. The estimated water yield would be between 470,000 to 640,000 acre-feet per year, depending on yearly rainfall and environmental regulations, according to DWR. The original project cost was over \$5 billion.

The Sites Project Authority, a Joint Powers Agency, was formed in 2010 to be a proponent and facilitator, to design and potentially acquire, construct, manage, govern, and operate Sites Reservoir and related facilities. Flood flows in the Sacramento River, over and above that needed to meet the demands of existing water rights holders, would be captured and pumped into Sites Reservoir. The Authority undertook a "Value Planning Study" in October 2019 to identify alternatives which would make the project more affordable to the project participants. The Value Planning Report was completed in April 2020 and the original project was scaled down.

A very preliminary analysis indicated that reservoir sizes of 1.3 to 1.5 million acre-ft (MAF) with assumed diversion criteria would be able to provide enough water to meet current participant demands. The

Tehama-Colusa Canal and the Colusa Basin Drain would be used as the conveyance systems. A recommended project with 1.5 MAF of storage with 1,000 cfs of release into the Sacramento River or to the Colusa Basin Drain at Dunnigan. The cost in 2019 dollars is estimated to be \$3.0 billion and 243,000 AFY long term yield.

The Project Authority stated that 21 agencies put up \$27 million for planning and studies with another \$19 million due this October to continue the process. Sites Reservoir was approved by the California Water Commission (CWC) for \$816 million of Proposition 1 funding on July 24, 2018; the CWC also agreed to provide \$40.8 million in early funding to assist in completing the needed environmental analyses and to obtain permits.

SGPWA has made a financial commitment of 10,000 AF and BCVWD committed to 4,000 AF (total 14,000 AF) to the Sites Project Authority to fund Phase 1 of the Sites Reservoir Study. Reliability is between 65% (worst case) to 100%. The result is, 9,100 AFY at 65% reliability as a worst case.

Sites Reservoir will not produce water until about 2030 or so; however, there will be costs incurred by project participants moving forward. For purposes of this analysis it is assumed that water would not be available until 2035. The Sites Project Authority's current plan will finance Phase 2 costs on a year-by-year basis.

The Sites Authority will be working closely with the federal Bureau of Reclamation to secure Bureau participation and funding which will reduce the cost to the current participants. It is believed the Sites Project Authority would be responsible for 60% of the project cost with the rest from the State and federal agencies. This may change since the Sites Authority anticipated slightly more Proposition 1 funding than the \$816 million.

It is important to understand that although Sites Reservoir will not be delivering water for another 15 years, at this time the project is moving forward and is named in the Governor's Water Resiliency Plan. The project has been awarded a substantial CWC Proposition 1 grant. The Sites Project Authority has a financing plan in place to fund the follow-on phases. The reservoir is an "off-stream" reservoir and so has a reduced environmental footprint. Although there is some risk in the implementation, with each step forward, the risk becomes less, and the project is more certain.

7.8 SALE OF STATE WATER PROJECT CONTRACTORS INCREMENTAL CWF RELIABILITY BENEFITS

All south of the Delta, SWP Contractors pay their proportionate share of the CWF costs. With the implementation of the DCP, there will be restoration of SWP reliability. Although all of the "South of the Delta" SWP Contractors will be paying their proportionate share of the DCP, for various reasons, a few SWP Contractors may not need the benefits of the increased yield and may be interested in transferring (selling) their incremental yield to other interested SWP Contractors, such as SGPWA. At this point in time, not enough is known about the sale of incremental availability yield and will not be considered further until it is better defined.

7.9 PURCHASE OR LEASING OF METROPOLITAN'S CWF PHASE 2 WATER

With original CWF 2-tunnel, 2-phase concept, the Metropolitan Water District of Southern California (Metropolitan) Board of Directors voted to fund their share of the original CWF plus agreed to fund the second phase of the CWF (second tunnel), i.e., the Central Valley Project share. This would have made water available for Metropolitan to sell/lease to other interested parties, e.g., SGPWA. With the DCP scaled down to one tunnel, this does not appear to be an option any longer.

7.10 OTHER SOURCES OF IMPORTED WATER

There are other sources of water available through the SWP which include:

7.10.1 ARTICLE 21 WATER

Article 21 Water is water that is offered for purchase by DWR resulting from reservoir releases needed to accommodate impending storm or snowmelt runoff when water is still available after operational requirements for SWP water deliveries, water quality and Sacramento-San Joaquin Delta requirements are met. This water is available only on short notice and must be taken immediately. BCVWD has capacity in its groundwater recharge facility to accommodate Article 21 Water. SGPWA is constructing their own Fiesta Recharge Facility which can be used for Article 21 Water. Article 21 Water is in addition to the State Water Contractor's Table A amount.

An analysis of Article 21 Water availability indicated the amount available is highly variable and there is competition for the water. If the requests for purchase are greater than the available amount, it is typically allocated on the basis of the requestors' Table A. A review of recent purchases from 2002 to 2015, with up to 17 "buyers," indicated that if SGPWA were a purchaser, their share would be about 0.5% of the total available. (The large agencies tend to dominate the purchases.) **Table 7-1** presents an analysis of Article 21 Water availability to SGPWA based on DWR records from 1967 – 2015. Two periods of time were analyzed: total record and recent record.

The results in **Table 7-1** indicate that 800 AFY, on the average of Article 21 could be obtained by SGPWA.

Table 7-1. Estimated Amount of Article 21 Water Available to SGPWA Based on 0.5% of Total Available AF

	1969-2015	2001- 2015
Average, AFY	939	824
Median, AFY	362	216
Maximum, AFY	4,542	3,655
75th Percentile, AFY	1,544	1,550

Article 21 water was available during the heavy snowfall year, 2018-19 although the SGPWA was not able to take advantage of this since the BCVWD connection was out of service due to construction of the expanded turnout and the SGPWA's Fiesta Recharge Facility was not operational.

7.10.2 TURN-BACK POOL WATER

Turn-back Pool Water is water that other State Water Contractors have ordered from DWR as part of their Table A but decided they did not need the water that particular year and sold it back to DWR. DWR in-turn offers it for purchase at a set price, quite inexpensive, to other State Water Contractors. Turn-back Pool Water has only been available since 1996 or so – after the Monterey Amendments to the State Water Contracts. Analysis of the data from 1997 through 2015, shows SWCs sold an average of 59,000 AFY of water back to the "pool" for purchase by other interested SWCs. The median value was 29,770 AFY. Purchase of Turn-back pool water is also competitive, depending on hydrologic conditions. Assuming SGPWA's share is 0.5% based on the analysis of Article 21 Water, 295 AFY on the average could be purchased (149 AFY median). It would be reasonable that SGPWA could rely on about 200 AFY of Turn-back pool water.

7.10.3 SHORT-TERM OR LONG-TERM WATER TRANSFERS OR EXCHANGES

Short-term or Long-term Water Transfers or Exchanges is water that can be obtained through exchanges and transfers from other State Water Contractors who do not need all of their Table A water in a given year or years. There are opportunities almost every year. The City of Ventura/Casitas MWD exchange described previously is an example of such an exchange.

7.10.4 RECOMMENDATIONS FOR SGPWA

There is considerable competition for the Turn-back Pool and Article 21 Water and its availability is uncertain from year to year. SGPWA should take advantage of this water whenever it is available and should be looking at short term transfers whenever water is available. It must be pointed out that transfers of SWC Table A is subject to the delivery SWP reliability.

7.11 SUMMARY OF AVAILABLE IMPORTED WATER SUPPLIES

Table 7-2 summarizes the range of available imported water supplies available to SGPWA based on the current and potential sources presented above. Agreements are in place for Ventura-Casitas (for 2018, 2019, and possibly 2020), AVEK-Nickel Water, and SBVMWD Surplus Water. Per Staff reports presented to the Board of Directors of the SGPWA, SGPWA appears to be in discussions with Ventura-Casitas and other agencies for future exchanges. SGPWA is one of the 22 SWCs that has signed on to the Yuba Accord. Their share of the Yuba Accord Water is 0.021% of the available water. In addition, through their State Water Contract, SGPWA can purchase Article 21 Water and Turn-back Pool Water.

The Agency Board has agreed to support and participate in the original CWF; it is assumed the agency will support the DCP. BCVWD and SGPWA have made financial commitments to Sites Reservoir and are currently planning to contribute to future phases of the Sites Project.

Table 7-3 presents a summary of current and projected SGPWA imported water supplies, through 2040 in 5-year increments based on the yields in **Table 7-2**.

Table 7-2 SGPWA Current and Projected Available Imported Water Supply through 2040

Source	Low Yield Case, Annual Amount, AFY	High Yield Case, Annual Amount, AFY	Comment
Existing Table A	8,300	10,380	17,300 AFY but only 60% reliable (10,380 AFY) per Bulletin 132; to degrade to approximately 48% (8,300 AFY) without California Water Fix (CWF) by 2035
Yuba Accord	200	200	When available, represents average per year
San Bernardino Valley MWD Surplus Table A Water (SBVMWD Water)	2,000	2,000	Up to 5,000 AFY available estimated 2 out of every 5 years (40%) of time = 2,000 AFY; agreement terminates in 2032 but can be extended.
Antelope Valley East Kern Water Agency (AVEK) Nickel Water, (AVEK Nickel Water)	1,700	1,700	20-year agreement terminates in 2037 with option for a 20-year extension, 10-year exchange
Additional Table A SGPWA Partner Agency	500	3,000	Looking at extended exchange agreement with Additional Table A SGPWA Partner Agency to utilize unused Table A. Estimated to be net 3,000 AFY initially to 500 AFY by 2040.
Article 21 Water Purchase	800	800	Variable represents average per year
Turn-back Pool Purchases	200	200	Variable represents average per year
Delta Conveyance Project (DCP)	0	0	Will increase reliability of State Water Project (SWP) back to 60-62%
Sites Reservoir	9,100	14,000	Worst case with 65% assumed reliability. (BCVWD has committed to 4,000 AFY of the 14,000 AFY)
Total Imported Water Potentially Available	22,800	32,280	

Table 7-3 Regional Summary of SGPWA Imported Water Supply, AFY

Source	Year					
	2018	2020	2025	2030	2035	2040
Imported Water Demand Table 6-9	10,272	11,360	15,874	19,214	21,057	23,950
Imported Water Demand, Table 6-9 , without banking or drought proofing	9,223	9,109	11,019	13,254	15,097	17,914
Table A	10,380	10,135	9,524	8,912	8,300	8,300
Yuba Accord	200	200	200	200	200	200
AVEK Nickel	1,700	1,700	1,700	1,700	1,700	
SBVMWD	2,000	2,000	2,000	2,000		
Ventura-Casitas	5,250		(2,100)			
Subtotal	19,530	14,035	11,324	12,812	10,200	8,500
Extension of SBVMWD Agreement					2,000	2,000
Extension of AVEK Nickel Agreement						1,700
Article 21 Water Purchases		800	800	800	800	800
Turn-back Pool Water Purchases		200	200	200	200	200
Additional Table A SGPWA Partner Agency Side Deal		3,000	2,500	2,000	1,500	500
Subtotal	19,530	18,035	14,824	15,812	14,700	13,700
Delta Conveyance Project Reliability Recovery to 60% (worst case)					2,080	2,080
Sites Reservoir (worst case)					9,100	9,100
Total Imported Water Supply	19,530	18,035	14,824	15,812	25,880	24,880

Until 2025, SGPWA has sufficient imported water to meet the demands of the City of Banning, BCVWD, YVWD/Calimesa as well as the demands from those SGPWA members currently not taking imported water. From 2025 to 2035 (when DCP and Sites Reservoir become operational), there is adequate imported water supply to meet the imported water demands but with reduced amounts available for banking. The region's member agencies would still have nearly 145,000 AF in banked storage which could be used if needed. In a normal year, banking would continue in 2030, but at slightly reduced annual amounts until the DCP and Sites Reservoir come online.

In **Table 7-3**, it was assumed the agreement with SBVMWD and AVEK Nickel would be extended due to the uncertainties in the yield of the Sites Reservoir and the Delta Conveyance Project. It was further assumed that there would continue to be Table A transfers and exchanges among SWCs; however, the potential amount is assumed to decrease over time as more of the SWCs require more of their Table A for their own use. **Table 7-3** includes an amount for Article 21 and Turn-back Pool purchases by SGPWA. It is also possible that a longer term arrangement can be worked out with Ventura-Casitas which would make more imported water available in the critical 2025 to 2035 period.

Figure 7-1 shows the SGPWA imported water demands, with and without banking, along with the amount of imported water potentially available taken from **Table 7-3**.

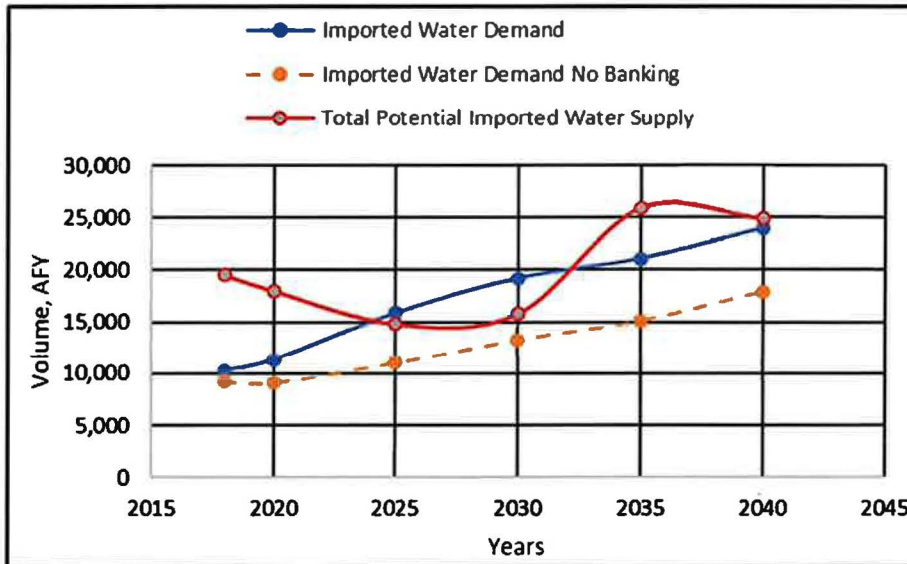


Figure 7-1. SGPWA Imported Water Demand vs Potential Imported Water Supply

Looking at **Table 7-3**, until 2025, SGPWA has sufficient imported water to meet the demands of the City of Banning, BCVWD, YVWD/Calimesa as well as the demands from those SGPWA members currently not taking imported water (called "other agencies"). BCVWD has determined these other agency demands are very conservative and believes it is unlikely these areas will be developing to require those demands within the timeframe shown. It would be reasonable to believe that the Yucaipa/Calimesa to Banning area will develop more fully before development moves into these outlying areas. Beyond 2025 to about 2032 or so, when Sites Reservoir and the Delta Conveyance Project come on-line, there is sufficient imported water supply available except that not all of the banking demands will be met. BCVWD

has determined the increase in imported water demand shown in **Figure 7-1** is aggressive and likely will not occur at the pace shown.

One of the uncertainties in **Table 7-3** and **Figure 7-1** is the yield from Sites Reservoir. BCVWD and the SGPWA have participated to 14,000 AFY; but only 65% of that was used in **Table 7-3** and **Figure 7-1** to account for reliability and uncertainty. If the full 14,000 AFY can be realized, the total imported water supply will increase by an amount of 4,900 AFY. At the growth rate in imported water demand shown in **Figure 7-1**, this would provide imported water supply to beyond 2045 with banking and drought proofing.

Beyond 2025, the SGPWA will have to aggressively secure additional Table A from partner SWP agencies or other agencies on a short term basis until Sites Reservoir and the DCP are on line. With Sites Reservoir and DCP on line, the SGPWA will have more than ample imported water supply to 2040. As the Sites Reservoir and DCP become more firm in terms of the estimated yield, it may be necessary for SGPWA to plan on securing more water supply. This could consist of:

- Temporary or permanent transfers of other SWCs' Table A.
- Participating in other local/regional water supply projects with transfers and exchanges to ensure water supply well beyond 2040

Nevertheless, **Table 6-9**, presented previously, shows that about 6,000 AFY will be banked regionally by the water suppliers, including BCVWD, between now and 2025, i.e. about 45,000 AF of additional water is projected to be in storage than the current 106,000 AF. (See **Table 6-9** presented previously). This would result in over 151,000 AF banked in regional storage. This storage could possibly be used to meet short term demands.

7.12 CONTINGENCY PLAN

Once DCP and Sites Reservoir are operational, there will be adequate water supply to meet the SGPWA demands beyond 2040; just how long will depend on the rate of growth. It is recognized that there is some risk that DCP and Sites Reservoir will be delayed or perhaps reduced in size and capacity. But as these projects go through the design and permitting process over the next 5 years or so, there will be time to assess the risk. SGPWA can take action to supplement their existing supply with short-term exchanges and transfers from other agencies. If it is evident that DCP and/or Sites Reservoir will not move forward, the short-term exchanges and transfers can be converted to long-term transfers. An option is to extend the AVEK-Nickel Water Agreement for another 20 years to 2057 as allowed in the existing agreement. Another option is participating with other local agencies in other water resource projects such as groundwater, brackish water, or even sea water desalination projects with water exchanges.

8. WATER SUPPLY AND DEMAND FOR BCVWD

Section 6.1.3 presented the water demand and water supply requirements, including imported water, under average hydrologic conditions for BCVWD. Section 7 quantified the imported water demands on the SGPWA from BCVWD and the other member agencies of the SGPWA. It is clear from the discussion at the end of Section 7, and **Figure 7-1**, presented above, that SGPWA will have enough imported water or has made commitments for, or taken steps to acquire additional imported water supply to meet its needs to year 2040 and beyond. However, there is risk that the Sites Reservoir and the DCP may be delayed or may not be implemented. The projects are moving forward through the design and permitting process, but there is always a chance that the projects could be stalled.

BCVWD's demands and imported water requirements are included in SGPWA's imported water demands. Therefore, BCVWD has firm supply including imported water to meet demands to 2025 under average demand and supply conditions based on the growth rates and water consumption rates presented previously in this WSA. So long as recycled water is implemented and planned, SGPWA water supply projects are finalized. Beyond 2025, BCVWD will rely on SGPWA to secure short-term water transfers, purchase of Turn-back Pool Water, and Article 21 Water to the time when DCP and Sites Reservoir are on line.

It should be noted that 28.6%, (4,000 AF/14,000AF) of Sites Reservoir Project Yield, indicated in **Table 7-2** for SGPWA, is committed to BCVWD by virtue of BCVWD's financial commitment to the Sites Reservoir Project Phase I and Phase 2 – 2019.

Figure 8-1 shows BCVWD's total potable and non-potable water supply and demand. **Figure 8-1** shows BCVWD is able to meet its demands, providing recycled water and imported water supplies are available. Of note is the significant contribution from recycled water, shown in magenta in **Figure 8-1**. Without recycled water, BCVWD would not be able to meet future demands. The imported water demands in **Figure 8-1** include the banking demands for drought proofing.

Figure 8-1 shows BCVWD's demand is less than the available supply. **Figure 8-1** is based on the data from **Table 6-8**, presented previously, and assumes that all of BCVWD's needed imported water is available. Availability depends on the development and imported water needs of those agencies in SGPWA service area that are not taking imported water.

Figure 8-2 shows the accumulated volume in BCVWD's Beaumont Basin groundwater storage account, and by 2040, the storage account is almost full (76,796 AF in storage). **Table 6-8**, presented previously, indicated that BCVWD's imported water demand was 10,470 AFY in 2040; this means that BCVWD is projected to have 7.3 years of imported water demand in storage which can be used to supply water during drought periods even if no SPW is available.

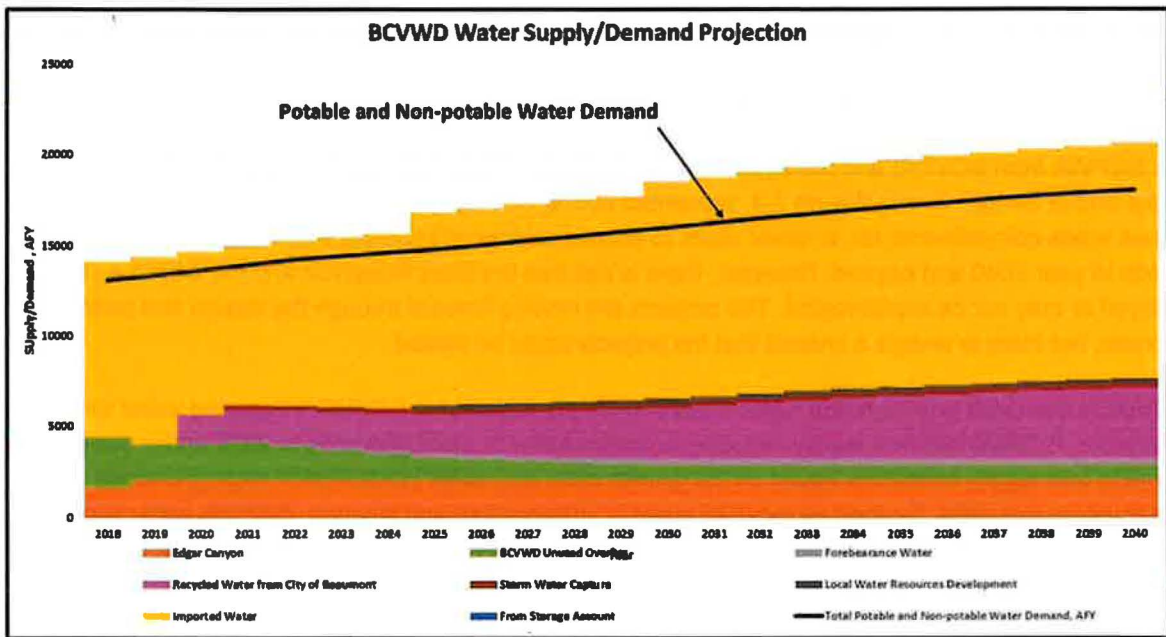


Figure 8-1. BCVWD's Water Supply and Demand Projection to 2040

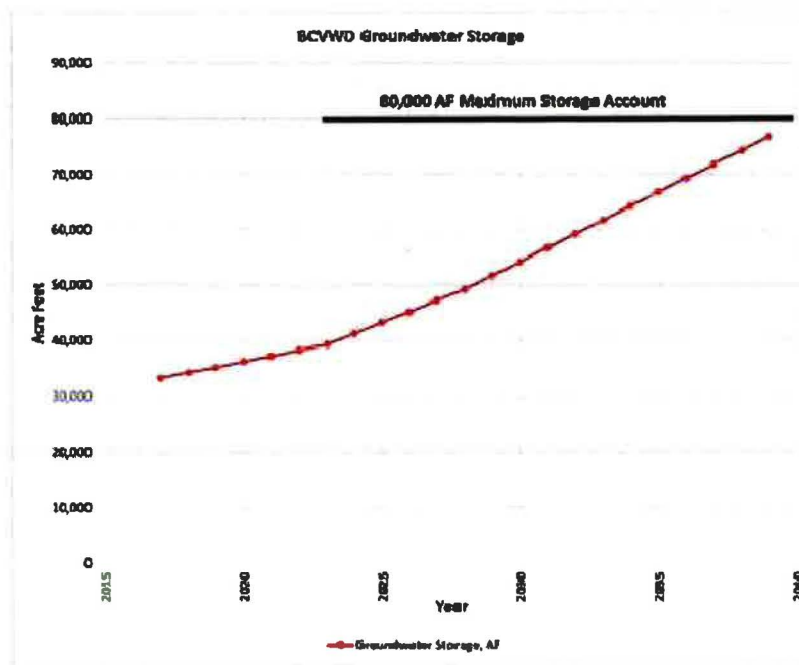


Figure 8-2. BCVWD's Groundwater Storage Balance to 2040

9. WATER SUPPLY SINGLE AND MULTIPLE DRY PERIOD ANALYSIS

The previous sections in this WSA analyzed a typical, normal or average, water supply year. The previous sections demonstrated there is adequate water supply both regionally and for BCVWD to meet the needs provided that the projects and agreements identified are implemented. But, in addition to a "normal" year, the WSA also requires a supply sufficiency analysis for critical dry year and multiple dry year conditions. The water supply conditions for these periods are presented in BCVWD's 2015 UWMP, Section 7, Water Supply Reliability Assessment. Key tables and information are extracted from the 2015 UWMP to support the analysis presented herein and updated. The scenarios evaluated in this section include:

- Single Critical Dry Year – the lowest water supplies available to BCVWD, a worst-case condition
- 2 Consecutive Dry Years – the lowest average available water supply over a continuous 2-year period
- 3 Consecutive Dry Years – the lowest average available water supply over a continuous 3-year period
- 6 Consecutive Dry Years – the lowest average available water supply over a continuous 6-year period

BCVWD will be relying on banked water to provide the major portion of the supply during these periods.

BCVWD enjoys the benefits of a groundwater basin (Beaumont Basin) with very large storage capacity. BCVWD and its neighboring agencies in the San Geronio Pass Area take advantage of this by banking imported water during wet years for use during extended droughts. Complementing the large storage capacity is the fact that percolation and recharge occur at relatively high rates. It is very easy to "bank" water in the Beaumont Basin. It is retained in the Basin due to well-managed groundwater levels and the ample storage capacity. **Figure 8-4** shows the amount of water BCVWD has accumulated in its storage account since 2003. Imported water began to be spread in 2006. As of the end of 2018, there were 34,794 AF in storage. BCVWD's current maximum storage capacity is 80,000 AF. **Figure 8-3** shows the drop-in storage in response to the drought in 2015 when there was very little imported water available for recharge and banking.

9.1 WATER SOURCE AVAILABILITY

The amount of water available during the dry periods from BCVWD's water sources are presented below.

9.1.1 GROUNDWATER

BEAUMONT BASIN

The Beaumont Basin is managed by the Beaumont Basin Watermaster under the principles of the Adjudication.

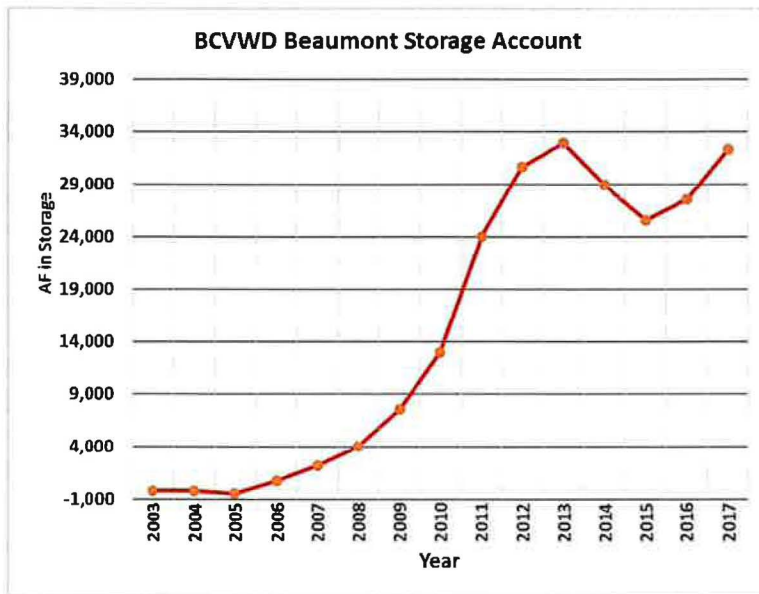


Figure 8-3. BCVWD Historic Beaumont Basin Groundwater Storage Account

In any year, BCVWD can pump out its stored (banked) water. The storage is replenished, at least partially, every year by forbearance water, reallocated unused Overlying Party pumping rights, and imported water when available. Recharge, using advanced treated recycled water from the City of Beaumont, is proposed to occur in the future. The amount of imported water that can be recharged in any year depends on DWR’s SWP allocation. This varies from year to year depending on the weather.

The amount of unused Overlying Party rights is determined by the Watermaster and is based on a 5-year moving average and could decrease slightly during drought periods as the Overlying Parties use more groundwater to compensate for the lack of rainfall. The forbearance water will decrease during dry periods as users reduce water consumption.

Table 9-1 shows the estimated amount of water credited to BCVWD by Watermaster for a single or multiple dry year analysis. For the dry year analysis, it was estimated that there would be a 15% conservation effect; in other words, for dry year analysis, only 85% of average annual forbearance, reallocated Overlying Party rights, etc. would be available. In Table 9-1, the 15% reduction factor is also applied to the recycled forbearance water to account for a potential reduction in treated wastewater due to water conservation effects.

Edgar Canyon Groundwater from Edgar Canyon is affected to some degree by climate. The average annual extraction from Edgar Canyon is 2,094 AFY (rounded to 2,100 AFY) based on records from 1983-2019. During that period of time, the minimum extracted was 1,117 AFY, which occurred in 1991. This can be considered the “Single Dry Year Water Available.” The 2-year, 3-year, and 6-year moving averages for the extractions from 1983-2019 were determined and are presented in Table 9-2 along with the Base Period for moving averages.

Table 9-1. Summary of BCVWD’s Forbearance and Reallocated Overlier Pumping Rights

Item	2018	2020	2025	2030	2035	2040
Total Allocated Overlying Party Rights, and Forbearance Water from Table 6-8, AFY	2,706	2,012	1,400	800	800	800
Expected to be Available for Single and Multiple Dry Year Analysis, AFY	2,300	1,710	1,190	680	680	680

Table 9-2. Groundwater Available from Edgar Canyon for Single and Multiple Dry Year Analysis

Drought Condition (Base Years)	Average Available over the Drought Period, AFY
Single Dry Year (1991)	1,117
2 Consecutive Dry Years (1990 – 91)	1,173
3 Consecutive Dry Years (1989 – 91)	1,230
6 Consecutive Dry Years (1987 – 92)	1,367

9.1.2 IMPORTED WATER

The amount of imported water available from the SGPWA via the State Water Project is climate dependent. A spreadsheet was developed using the 2015 DWR Delivery Capability Report simulation data (1922 to 2003) for SGPWA to develop an estimate of the delivery capability for the single dry year and multiple dry year reliability analysis. The 2-, 3-, and 6-year moving averages of annual estimated delivery allocations were determined for the period 1922-2003. A summary of the Table A delivery percentages is shown in **Table 9-3**.

The percentages in **Table 9-3** were compared to actual SWP delivery allocations for the period 1992 to 2018, a 26-year period:

Minimum year	5% (2014)
Minimum 2 consecutive years	12.5% (2014-15)
Minimum 3 consecutive years	20% (2013 – 15)
Minimum 6 consecutive years	40% (2013 – 18)

As can be seen, the actual minimum year and minimum 2 and 3 consecutive years allocation percentages are less than those reported in the 2015 DWR SWP Delivery Capability Report. So, for the

reliability analysis in this WSA, the allocation percentages shown in **Table 9-4** below will be used to be conservative, except for the 6-year dry period where 28% will be used.

**Table 9-3. SGPWA SWP Delivery Capability as Percent of Table A
(Based on 2015 DWR SWP Delivery Capability Report)**

Dry Year(s)	Single	2-year	3-year	6-year
Table A Annual Delivery Average Over the Drought Period, %	8	19	22	28

Table 9-4. SGPWA SWP Delivery Capability as Percent of Table A (Used for WSA Reliability Analysis)

Dry Year(s)	Single	2-year	3-year	6-year
Table A Annual Delivery Average Over the Drought Period, %	5	12.5	20	28

Previously, in this WSA, a number of imported water sources available to SGPWA were presented. Not all of these will be available during extended dry periods, however.

Yuba Accord Water is a dry year program and SGPWA can expect 200 AFY even during dry years. AVEK-Nickel Water is “south of the Delta” water and is not affected by DWR’s SWP reliability issues and is available every year until termination of the existing agreement in 2037. The DCP reliability recovery water and the California Water Fix Side Deals would be available during extended dry periods but is subject to the average Table A delivery percentages as SPW in **Table 9-4** above.

During dry periods, San Bernardino Valley MWD Surplus Water, Article 21 Water, and Turn-back Pool Water would likely not be available and should not be counted on for supply. Similarly, the availability of short- and long-term exchanges is unlikely, which would also include any additional Table A Water should SGPWA be able to secure a long-term exchange contract with a Partner Agency.

The Sites Reservoir Project was designed to be a dry period flow augmentation project. Excess storm flows in the Sacramento River are diverted and pumped into Sites Reservoir, stored, and released back into the Sacramento River during dry periods. Data from the Sites Project Authority submitted with their application to the California Water Commission for Proposition 1 Funding was used to determine the amount of water which could be depended on during dry periods. **Figure 9-1** below, extracted from the Sites Reservoir Project Authority’s Proposition 1 Application Executive Summary, shows the dry year benefits based on 82 years of hydrologic simulation using the CalSim II Model. (Sites Project Authority - 2017. Sites Project Executive Summary for California’s Water Storage Investment Program, August 14.)

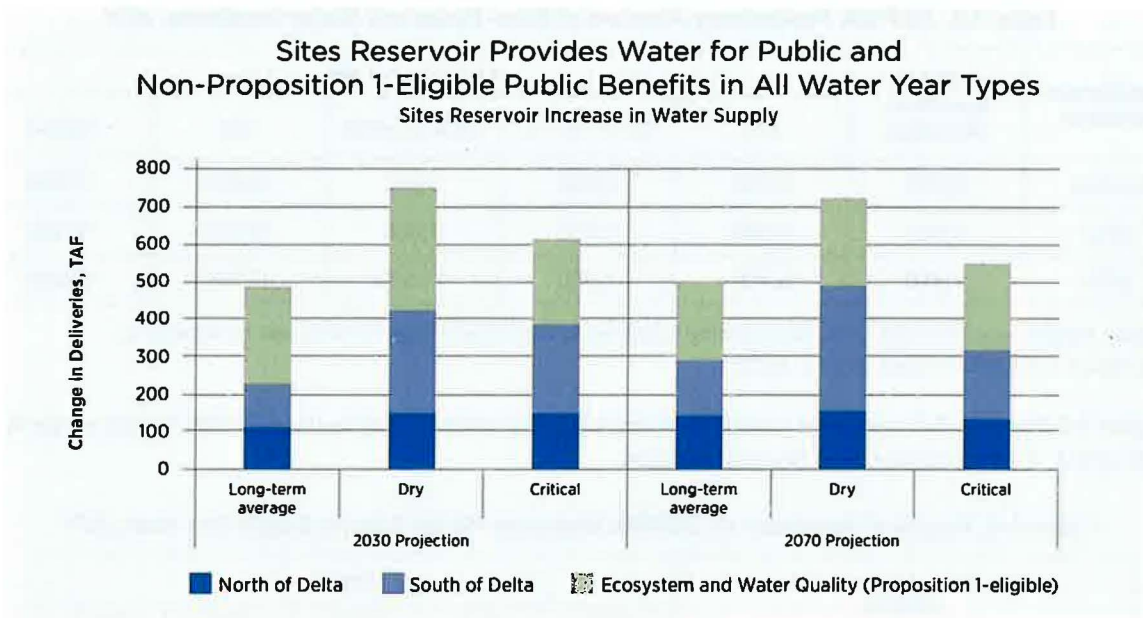


Figure 9-1. Sites Reservoir Available Water 2030 and 2070 (Attachment D9)

In **Attachment D9**, prepared by the Sites Project Authority, in response to questions from the California Water Commission, February 23, 2018, provided a breakdown of the estimated amounts of Sites Project Water which would be delivered to the project participants. **Table 9-5** presents a summary of the preliminary estimates of Sites Reservoir Water available to SGPWA. It is important to note this is a preliminary estimate developed prior to “Value Planning Analysis” described previously. No new information is available at this time and this WSA will rely on the data in Sites Project Authority **Attachment D9** as presented in **Table 9-5**.

The modeling that was performed for the application was prescribed by the California Water Commission and includes the effects of climate change. For the analysis in this WSA, the year 2030 values will be used for 2030 through 2040. The “critical” volume will be used for all of the dry period analyses to be conservative.

Table 9-5. SGPWA Preliminary Amount of Sites Reservoir Water Available, AFY

Development Condition	82-year Simulation (Average)	Water Year Type				
		Wet	Above Normal	Below Normal	Dry	Critical
Current	8,400	2,700	2,900	5,600	19,000	13,800
2030	9,500	3,000	7,700	7,400	18,000	16,400
2070	11400	5,400	7,300	11,500	17,900	17,200

Source: Attachment D9 of Sites Project Authority response to California Water Commission comments on Proposition 1 Application February 23, 2018.

Tables 9-6 through 9-8 present a summary of the imported water supply to the SGPWA for the single dry year, and 2, 3 and 6 consecutive dry year periods.

Table 9-6. Regional Summary of SGPWA Imported Water Supply Single Dry Year, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (5%)	865	865	865	865	865
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	2,765	2,765	2,765	2,765	2,765
DCP (worst case)					
DCP Allocation (5% of reliability recovery, 2,080 AFY)				104	104
Sites Reservoir Critical Dry Period (From Table 9-5)				16,400	16,400
Total Imported Water Supply	2,765	2,765	2,765	19,269	19,269

Table 9-7. Regional Summary of SGPWA Imported Water Supply Two Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (12.5%)	2,163	2,163	2,163	2,163	2,163
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	4,063	4,063	4,063	4,063	4,063
DCP Allocation (12.5% of reliability recovery, 2,080 AFY)				260	260
Sites Reservoir Critical Dry Period (From Table 9-5)				16,400	16,400
Total Imported Water Supply	4,063	4,063	4,063	20,723	20,723

Table 9-8. Regional Summary of SGPWA Imported Water Supply Three Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (20%)	3,460	3,460	3,460	3,460	3,460
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	5,360	5,360	5,360	5,360	5,360
DCP Allocation (20% of reliability recovery, 2,080 AFY)				416	416
Sites Reservoir Critical Dry Period (From Table 9-5)				16,400	16,400
Total Imported Water Supply	5,360	5,360	5,360	22,176	22,176

Table 9-9. Regional Summary of SGPWA Imported Water Supply Six Consecutive Dry Years, AFY

Source	Year				
	2020	2025	2030	2035	2040
Table A	17,300	17,300	17,300	17,300	17,300
Allocation (28%)	4,844	4,844	4,844	4,844	4,844
Yuba Accord (Dry Year Program)	200	200	200	200	200
AVEK Nickel (Not Affected and extended)	1,700	1,700	1,700	1,700	1,700
Subtotal	6,744	6,744	6,744	6,744	6,744
DCP Allocation (28% of reliability recovery, 2,080 AFY)				582	582
Sites Reservoir Dry Period (From Table 9-5)				16,400	16,400
Total Imported Water Supply	6,744	6,744	6,744	23,726	23,726

Table 9-10 presents a summary of total SGPWA regional imported water demand and the imported water supply available during the single and multiple dry years. The demand does not include the “banking” demand, since “banking” would not be occurring during years when imported water supply is reduced. **Table 9-10** shows the conditions when the imported water demand exceeds the supply which will require SGPWA’s member agencies, like BCVWD to withdraw water from their storage account. The supply of imported water is less than the demand until Sites Reservoir comes on line about year 2035.

Table 9-10. Summary of SGPWA Regional Imported Water Supply and Demand Single and Multiple Dry Years

Source	Year				
	2020	2025	2030	2035	2040
Demand without Banking or drought proofing (Table 6-9, 7-4), AFY	9,109	11,019	13,254	15,097	17,924
Total Supply					
Single Dry Year (Table 9-6), AFY	2,765	2,765	2,765	19,269	19,269
2 Consecutive Dry Years (Table 9-7), AFY	4,063	4,063	4,063	20,723	20,723
3 Consecutive Dry Years (Table 9-8), AFY	5,360	5,360	5,360	22,176	22,176
6 Consecutive Dry Years (Table 9-9), AFY	6,744	6,744	6,744	23,726	23,726

When the demand for imported water exceeds the supply, it is reasonable to assume the imported water will be allocated in proportion to the member agency's fraction of the total imported water demand without banking. **Table 9-11** shows the allocation percentages.

Table 9-11. Member Agency's Percent of Available Imported Water When Demand Exceeds Supply

Agency	Year				
	2020	2025	2030	2035	2040
City of Banning	0	0	0	0	5.6%
YVWD/Calimesa	6.7%	7.0%	7.3%	7.9%	8.1%
BCVWD	87.8%	78.5%	71.6%	66.3%	58.4%
Other Member Agencies	5.5%	14.5%	21.1%	25.8%	27.9%
Total	100%	100%	100%	100%	100%

Table 9-12 shows the estimated amount of imported water BCVWD can expect during single and multiple dry year periods based on the amount of imported water presented in **Table 9-10** and the allocation percentages in **Table 9-11**.

Table 9-12. BCVWD Available Imported Water During Single and Multiple Dry Year Periods

Agency	Year				
	2020	2025	2030	2035	2040
Single Dry Year, AFY	2,400	2,100	2,000	12,800	11,300
2 Consecutive Dry Years, AFY	3,500	3,200	2,900	13,700	12,100
3 Consecutive Dry Years, AFY	4,700	4,200	3,800	14,700	13,000
6 Consecutive Dry Years, AFY	5,900	5,300	4,800	15,700	13,800

9.1.3 RECYCLED WATER

Recycled water from the City is considered to be consistently available; although during droughts, consumers are more aware of water conservation and reduce their indoor water consumption somewhat. They are more aware of the need to do only full loads of laundry, full loads for the dishwasher, etc. Agencies, including the City of Beaumont, have observed a reduction in wastewater flows during the recent drought.

The average year amount of recycled water from the City is taken from **Table 6-8** presented previously. As stated in the discussion for **Table 6-8**, the total wastewater produced by the City is reduced by 1.8 mgd for habitat maintenance, and a capacity factor of 75% was applied to the remaining water to account for brine and other losses. For a single dry year, an estimate of 90% of the normal, average recycled water will be available. As the drought becomes more pervasive, the amount of recycled water is estimated to reduce further to 85% of normal. **Table 9-13** provides an estimate of the available recycled water during extended dry periods from the City.

Table 9-13. BCVWD Available Recycled Water During Single and Multiple Dry Year Periods

Agency	Year				
	2020	2025	2030	2035	2040
Average Year (Table 6-8), AFY	1,556	2,188	2,840	3,487	3,930
Single Dry Year (90%), AFY	1,400	1,970	2,555	3,135	3,535
2, 3, and 6 Consecutive Dry Years (85%), AFY	1,320	1,860	2,415	2,960	3,340

9.1.4 STORMWATER AND OTHER LOCAL WATER RESOURCES

Storm water and urban runoff quantities are dependent on rainfall. Review of the rainfall record at Beaumont for the period 1888 – 2006 resulted in the data shown in Table 9-14. To determine the multiple dry year rainfall as a percent of the average rainfall, the 2-, 3-, and 6-year moving averages of the annual rainfall was determined.

Table 9-14. Ratio of Dry Period Precipitation to Average Precipitation at Beaumont and Estimated New Water from Storm Water Capture and Local Water Resource Projects

Dry Year(s)	Single	2-year	3-year	6-year
% of Annual Average	36%	45%	45%	65%
Total Storm water Capture, beginning 2021, 250 AFY	90	110	110	160
Total Local Water Resource Projects, beginning 2025, 250 AFY	90	110	110	160

9.2 WATER DEMANDS DURING CRITICAL AND MULTI-YEAR PERIODS

Table 6-8 showed the average BCVWD water demands (potable and non- potable). These demands are used in the Dry Period Reliability Analysis below for the 1, 2, and 3 consecutive year dry periods, primarily because there may not be enough time to implement water demand restrictions and see the effect of these restrictions on demand. However, for the 6 consecutive year dry period, it is assumed the water shortage contingency planning actions set forth in Section 8 of BCVWD’s 2015 UWMP would be in effect and at least a 15% reduction in demand would be obtained. This is over and above the nominal water conservation efforts envisioned in the development of the average demands in Table 6-8 presented previously.

Water supply for single dry year, 2 consecutive dry years, 3 consecutive dry years, and 6 consecutive dry years are presented in Tables 9-15 through 9-18 respectively.

Tables 9-15 through 9-18 demonstrate BCVWD can provide water to the planned developments listed in Table 6-6 (presented previously) and to the Potrero Logistics Center Project during critical dry year and multiple dry year periods by relying on BCVWD’s Beaumont Basin Groundwater Storage assuming DCP

and Sites Reservoir are on-line as planned. BCVWD will need to maintain 25,111 AF of water banked in storage to meet the 6-year dry period by the time Sites Reservoir and the CWF are “on-line.” This is not an unreasonable amount of storage considering BCVWD has an 80,000 AF storage account and as of the end of 2018, 34,794 AF in storage.

Table 6-8, presented previously, provided BCVWD’s Beaumont Basin storage account balance under the basis of average water supply conditions assuming the development projects listed in **Table 6-6** (presented previously) were constructed. **Table 6-8** shows a steady increase in projected groundwater storage from 35,296 AF in 2020 to almost 76,800 AF in the year 2040. To achieve this level of storage, BCVWD will be banking additional water for drought proofing to able to supply water during critical and multiple dry year period.

Table 9-15. BCVWD Water Supply Summary – Critical Dry Year

Single Dry Year					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,117	1,117	1,117	1,117	1,117
Beaumont Basin, Allocated Overlier Pumping Rights and Forbearance Water, AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects, AFY	90	90	90	90	90
Recycled Water, AFY	1,400	1,970	2,555	3,135	3,535
Imported SPW, AFY	2,400	2,100	2,000	12,800	11,300
Subtotal Supply, AFY	6,807	6,557	6,532	17,912	16,812
From Banked Beaumont Basin Storage, AF	6,861	8,284	9,500	1,280	1,288

Table 9-16. BCVWD Water Supply Summary – 2 Consecutive Dry Years

2 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,173	1,173	1,173	1,173	1,173
Beaumont Basin, Allocated Overlie Pumping Rights and Forbearance Water, AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW, AFY	3,500	3,200	2,900	13,700	12,100
Subtotal Supply, AFY	7,883	7,603	7,348	18,693	17,473
From Banked Beaumont Basin Storage, AFY	5,785	7,238	8,684	499	627
Total Volume Withdrawn from Storage, AF	11,570	14,476	17,368	998	1,254

Table 9-17. BCVWD Water Supply Summary – 3 Consecutive Dry Years

3 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	13,668	14,841	16,032	19,192	18,100
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,230	1,230	1,230	1,230	1,230
Beaumont Basin, Allocated Overlier Pumping Rights and Forbearance Water, AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW, AFY	4,700	4,200	3,800	14,700	13,000
Subtotal Supply, AFY	9,140	8,660	8,305	19,750	18,430
From Banked Beaumont Basin Storage, AFY	4,528	6,181	7,727	-558	-330
Total Volume Withdrawn from Storage, AF	13,584	18,543	23,181	-1,674	-990

Table 9-18. BCVWD Water Supply Summary – 6 Consecutive Dry Years

6 Consecutive Dry Years					
	YEAR				
	2020	2025	2030	2035	2040
DEMAND					
Total Water Demand	11,618	12,615	13,627	16,313	15,385
SUPPLY					
Groundwater					
Edgar Canyon, AFY	1,367	1,367	1,367	1,367	1,367
Beaumont Basin, Allocated Overlier Pumping Rights and Forbearance Water, AFY	1,710	1,190	680	680	680
Storm Water, AFY	90	90	90	90	90
Other Local Water Resource Projects	90	90	90	90	90
Recycled Water, AFY	1,320	1,860	2,415	2,960	3,340
Imported SPW, AFY	5,900	5,300	4,800	15,700	13,800
Subtotal Supply, AFY	10,477	9,897	9,442	20,887	19,367
From Banked Beaumont Basin Storage, AFY	1,141	2,718	4,185	-4,574	-3,982
Total Volume Withdrawn from Storage, AF	6,845	16,307	25,111	-27,443	-23,892

The water banking is clearly stated in BCVWD's 2015 UWMP:

BCVWD's plan, which is shown in BCVWD's 2015 UWMP envisions banking anywhere from 1,000 AFY to 2,500 AFY to drought proof new development. This is accounted for in the spreadsheet each year. Should there be a year when the projected amount cannot be delivered by SGPWA, any deficiency will be made up in successive years when adequate supply is available. (As stated in BCVWD's 2015 UWMP pg. 7-4)

In addition to BCVWD, YVWD/Calimesa and the City of Banning have storage accounts which, when combined with BCVWD's, have 103,748 AF in storage as of the end of 2018. Previous Tables 6-5 and 6-2 herein show that the storage accounts for YVWD/Calimesa and the City of Banning are projected to have 50,000 and nearly 76,510 AF in storage by 2040. When combined with BCVWD's projected storage account balance, on a regional basis there will be over 200,000 AF in banked storage – more than ample to meet the needs during short-term droughts.

10. CONCLUSIONS

The Potrero Logistics Center project is estimated to result in an average potable water building demand of 5,775 gpd (4.6 AFY- factored to 260 days per year) and a landscape demand of 9,563 gpd (10.7 AFY – 365 days per year).

Based on the analysis presented in this report, BCVWD can meet the water demands for the Project.

The total water demand including potable building demand (5,775 gpd) and landscape demand (9,563 gpd) equals 15,338 gpd which is less than the 22,000 gpd allotment in the original Will Serve Letter issued by BCVWD on June 11, 2014.

- Based on comparison of the SGPWA Imported Water Demands in **Table 6-9** and the Imported Water Supply in **Table 7-3**, and summarized below, the SGPWA has sufficient imported water to meet the regional demands, including the demands of those member agencies currently not taking imported water, until 2040.

Source	Year					
	2018	2020	2025	2030	2035	2040
Total Potential Imported Water Supply (Table 7-3), AFY	19,530	18,035	14,824	15,812	25,880	24,880
Total Firm Imported Water Supply, no Partner Agency Side Deals, Article 21 Water, Turn-back Pool Water, etc. (derived from Table 7-3). AFY	19,530	14,035	11,324	12,812	10,200	8,500*
Imported Water Demand (Table 6-9 and 7-3), AFY	10,272	11,360	15,874	19,214	21,057	23,950
Imported Water Demand, (Table 6-9 and 7-3), no Banking or Drought Proofing, AFY	9,223	9,109	11,019	13,254	15,097	17,914

*10,200 AFY with Nickel Extension

However, not all of those supplies are firm with agreements in place. Beyond 2025, SGPWA and BCVWD will be relying on the reliability of Table A, the availability of Article 21 and Turn-back Pool Water, short term water transfers which are not yet agreed to, and the DCP and Sites Reservoir. Both DCP and Sites Reservoir are moving forward, and there is more than reasonable probability these projects will come to fruition. But there is always some risk. This risk will decrease over time as design and permitting progress.

- The land use planning for the Project site was included in the list of planned development projects in BCVWD's 2015 UWMP which demonstrated adequate water supplies up to the year 2040—the maximum forecast for water supply planning in the UWMP. Thus, using the site for an industrial warehouse results in a net water demand reduction that BCVWD can allocate to other projects.
- BCVWD prepared a series of White Papers which analyzed the regional (SGPWA) imported water supply requirements and funding requirements. These White Papers provided a starting point for the

preparation of this WSA. The basis for the White Papers was a regional spreadsheet demand model, developed by BCVWD, which was reviewed by the City of Banning and YVWD.

- The White Papers indicated that SGPWA can obtain sufficient imported water supply to supplement local supplies to meet regional needs including BCVWD's needs. The White Papers also indicated that adequate funding is available to implement the imported water projects and short and long term transfers.
- BCVWD prepared and adopted a Potable Water Master Plan which identified water needs and facility needs to build-out. The BCVWD 2015 UWMP identified recycled water from the City of Beaumont for non-potable water irrigation with a plan for the recharge of surplus recycled water with appropriate treatment and permits.
- There is adequate water supply for the Project to 2040 and beyond. BCVWD can meet the Project's needs as well as BCVWD's existing demands and the demands of the other planned and potential developments within BCVWD's service area which were listed in this WSA and which will be constructed between now and 2040.
- Critical and multiple dry year reliability analysis demonstrated that BCVWD will be able to meet BCVWD's existing demands and the demands of the other planned and potential developments within BCVWD's service area which were listed in this WSA and which will be constructed between now and 2040. BCVWD will supplement their existing supply sources during these dry periods with banked water in BCVWD's Beaumont Basin Groundwater Storage Account.
- Pursuant to §10910 of the California Water Code (SB 610) and information provided in this WSA, BCVWD has determined that sufficient currently available and planned supplies exist to meet the water demands of the proposed Project in addition to the existing and other projected demands during normal, single dry and multiple dry years over the next 20 years.
- Pursuant to the California Government Code Section §66473.7, (SB 221) BCVWD has determined that it has sufficient and adequate water supply available to serve long-term needs of the Project in addition to the existing and other projected demands during normal, single dry and multiple dry years over the next 20 years.

11. REFERENCES

1. 2015 Urban Water Management Plan, Beaumont Cherry Valley Water District, adopted by Board of Directors, January 17, 2017; acknowledged by California Department of Water Resources, March 14, 2018.
2. Potable Water Master Plan, Beaumont Cherry Valley Water District, adopted by Board of Directors, January 13, 2016.
3. White Paper No 1, Discussion of the Analysis of State Project Water (SPW) Requirements for SGPWA and BCVWD, prepared by BCVWD, September 6, 2017.
4. White Paper No 2, Role of Groundwater Storage and Banking in Meeting State Project Water (SPW) Requirements for SGPWA and BCVWD, prepared by BCVWD, November 15, 2017.
5. White Paper No 3, Water Supply Portfolio Unit Costs, prepared by BCVWD, December 20, 2017.
6. White Paper No 3, Water Supply Portfolio Unit Costs, prepared by BCVWD, December 20, 2017.
7. White Paper No 4, Water Supply Portfolio Funding Requirements, prepared by BCVWD, December 20, 2017.
8. White Paper No 5, Funding Strategies, prepared by BCVWD, January 2, 2018.
9. White Paper No 6 (Rev. 4), Updated San Gorgonio Pass Regional Water Supply Planning Spreadsheet, prepared by BCVWD, May 16, 2018.
10. White Paper No 7 (Draft), Funding Strategies for New and Existing Regional Water Supplies, Sites Reservoir and Other Sources, prepared by BCVWD, August 15, 2018.
11. Appendix F, San Gorgonio Pass Water Agency 2015 UWMP, Yuba Accord Agreements.
12. Sites Project Authority, Sites Reservoir Project Description and Assumptions of with-Project Conditions for Years 2030 and 2070, plus with and without -Project current conditions, Appendix A1 to Application, August 9, 2017
13. Sites Project Authority, Attachment D, Water Operations Review, response to California Water Commission Comments on Application, February 23, 2018.
14. Sites Project Authority, Modeling Results Compendium, Appendix A6.D. to Application, August 9, 2017
15. Sites Project Authority, Sites Project to Receive \$816 million in State Funding, press release, July 24, 2018.
16. San Gorgonio Pass Water Agency, Update of Sites Reservoir, presentation to Board of Directors, July 9, 2018
17. Consideration of the San Gorgonio Pass Water Agency's April 6, 2017 Sites Reservoir Cost Sharing Draft Agreement and Associated Transmittal Letter dates April 6, 2017, prepared by Eric Fraser (BCVWD) to BCVWD Board of Directors, May 9, 2017.
18. San Gorgonio Pass Water Agency, 2015 Urban Water Management Plan, prepared by Kennedy/Jenks Consultants, adopted by Board of Directors, March 20, 2017.
19. SGPWA General Manager to Board of Directors, Surplus Water Sale Agreement with San Bernardino Valley MWD ("Valley District") October 16, 2017. Approved by SGPWA Board of Directors per Regular Board Meeting Minutes, October 16, 2017.
20. SGPWA General Manager to Board of Directors, Consideration and possible action to enter into a Water Supply Agreement with the Antelope Valley-East Kern Water Agency, June 19, 2017

21. SGPWA Meeting Minutes, Regular Meeting of the Board of Directors, Resolution 2015- 05, Adoption of Facility Capacity Fee, July 27, 2015.
22. San Gorgonio Integrated Regional Water Management Plan, prepared by the Regional Water Management Group of the San Gorgonio Integrated Regional Water Management Region, May 2, 2018, Revised August 1, 2018
23. Yucaipa Valley Water District, Water Supply Assessment and Written Verification of Supply for the Mesa Verde Development, Calimesa, CA, August 15, 2017.
24. Summerwind Ranch at Oak Valley, Specific Plan Area No. 1, Amendment No. 1, City of Calimesa, January 21, 2005
25. Beaumont Basin Watermaster (2017). A Resolution of the Beaumont Basin Watermaster Approving the Transfer of Overlying Water Rights to Specific Parcel, Resolution 2017-02 (Summerwind Ranch Specific Plan Parcels).
26. City of Banning Water Supply Assessment for Butterfield Specific Plan, prepared by RBF Consulting and Brownstein|Hyatt|Farber|Schreck, issued June 2011 with Draft EIR, Modified December 2011 by Section 4.1 of the Final EIR.
27. City of Banning Water Supply Assessment, Rancho San Gorgonio Specific Plan, prepared by Madole & Associates and Encompass Associates for Rancho San Gorgonio, LLC, September 30, 2015.
28. Beaumont Basin Watermaster, 2018 Consolidated Annual Report and Engineering Report (Draft), prepared by Alvarado Smith, Legal Counsel; Alda, Inc. in association with Thomas Harder Company, Engineering; and Rogers, Anderson, Malody, and Scott, LLP, Financial Auditors, February, 2019.
29. U.S. Fish and Wildlife Service, Karen Goebel letter to M. Jones, SWRCB, Informational Consultation for Beaumont Cherry Valley Water District Recycled Water System (State Revolving Fund (SRF) Loan No. C-06-5157-110), Riverside County, California, February 29, 2008.
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34. Sonoma County Water Coalition v: Sonoma County Water Agency (2010) 189 Cal. App. 4th 33, 39, taken from SGPWA 2015 UWMP.
35. San Timoteo Watershed Management Authority vs. City of Banning et al, Superior Court of the State of California, for the County pf Riverside, Riverside Court, Stipulation for Entry of Judgement Adjudicating Groundwater Rights in the Beaumont Basin, RIC 389197, February 4, 2004
36. Pass Area Land Use Plan, October 2003, Part of Riverside County General Plan.
37. The Pass Area Plan, County of Riverside General Plan Amendment 960, Draft March 2014.

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39. DWR, Agreement for e Supply and Conveyance of Water by the Department of Water Resources for the state of California to the Participating State Water Contractors under the Dry Year Water Purchase Program, March 31 , 2008.
40. 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

Appendix A
Original Will Serve Letter



**BEAUMONT-CHERRY VALLEY WATER DISTRICT
AGENDA
REGULAR MEETING OF THE BOARD OF DIRECTORS
560 Magnolia Avenue, Beaumont, CA 92223
Wednesday, June 11th, 2014
Regular Session 7:00 p.m.**

Call to Order, President Woll

Pledge of Allegiance, Director Ball

Invocation, Director Ross

Roll Call

Public Comment

PUBLIC COMMENT: At this time, any person may address the Board of Directors on matters within its jurisdiction which are not on the agenda. However, any non-agenda matters that require action will be referred to Staff for a report and possible action at a subsequent meeting. To provide comments on specific agenda items, please complete a speaker's request form and provide the completed form to the Board Secretary prior to the Board meeting. Please limit your comments to three minutes. Sharing or passing time to another speaker is not permitted.

ACTION ITEMS

- 1. Adoption of the Agenda (pages 1-3)**
- 2. Consent Calendar:** All matters listed under the Consent Calendar are considered by the Board of Directors to be routine and will be enacted in one motion. There will be no discussion of these items prior to the time the Board considers the motion unless members of the Board, the administrative staff, or the public request specific items to be discussed and/or removed from the Consent Calendar.
 - a. April 2014 Budget Variance Report Review** (pages 4-8)
 - b. April 30th, 2014 Cash/Investment Balance Report** (page 9)
 - c. May 2014 Check Register Review** (pages 10-22)
 - d. May 2014 Invoices Pending Approval** (pages 23-34)
 - e. Minutes of the Regular Meeting May 14th, 2014** (pages 35-39)
- 3. Continued Discussion Related to Current Drought Conditions and Review of the District's Water Supply Reliability and Water Shortage Contingency Planning Guidelines as Set Forth in Section 5 of the District's 2013 Urban Water Management Plan** (pages 40-81)**
- 4. Discussion Regarding the Board's Responsibility in Regards to Land Planning** (page 82)**
- 5. Consideration of Resolution 2014-03 A Resolution of the Board of Directors of the Beaumont-Cherry Valley Water District Requesting**

the County of Riverside Board of Supervisors Oppose Proposed Zone Changes to the Riverside County General Plan (pages 83-84)**

6. Discussion of Grand Avenue Storm Drain Project and Request for Board Direction Regarding Continued Project Development (pages 85-87)**

7. Consideration of Annexation of Parcel for ASM Beaumont Business Center Development (located South of State Route 60/West of Potrero Road) and Approval of Water Service "Will Serve Letter"* (pages 88-95)**

8. Consideration of Annexation of Parcels for Revised Hidden Canyon II Development (located South of State Route 60/West of Potrero Road) and Approval of Water Service "Will Serve Letter"* (pages 96-100)**

9. Consideration of Approval of Water Service "Will Serve Letter" for the proposed Country Club Village Development (pages 101-109)**

10. Reports For Discussion

- a. Ad Hoc Committees
- b. General Manager
- c. Directors Reports
- d. Legal Counsel Report

11. Announcements

- Beaumont Basin Watermaster meeting, tentatively scheduled, July 2nd, 2014 at 10:00 a.m.
- Finance & Audit Committee meeting, July 3rd, 2014 at 3:00 p.m.
- Regular Board meeting, July 9th, 2014 at 7:00 p.m.
- Beaumont Basin Watermaster meeting, August 6th, 2014 at 10:00 a.m.
- Finance & Audit Committee meeting, August 7th, 2014 at 3:00 p.m.
- Regular Board meeting, August 13th, 2014 at 7:00 p.m.

12. Action List for Future Meetings

- Schedule a workshop to discuss the landscape for the Noble Creek Recharge Phase II Project with the public
- Discussion of facilities fees for new construction
- Update the Board on Infosend after one year
- Solar System Update

13. Recess to Closed Session

- a. Conference with Labor Negotiators pursuant to Government Code 54957.6:
Agency Negotiator: Eric Fraser
Represented Employees: BCVWD Employee Association

14. Adjournment

** Information included in the agenda packet

AVAILABILITY OF AGENDA MATERIALS - Agenda exhibits and other writings that are disclosable public records distributed to all or a majority of the members of the Beaumont-Cherry Valley Water District Board of Directors in connection with a matter subject to discussion or consideration at an open meeting of the Board of Directors are available for public inspection in the District's office, at 560 Magnolia Avenue, Beaumont, California ("District Office"). If such writings are distributed to members of the Board less than 72 hours prior to the meeting, they will be available from the District's Board Secretary of the District Office at the same time as they are distributed to Board Members, except that if such writings are distributed one hour prior to, or during the meeting, they can be made available from the District's Board Secretary in the Board Room of the District's Office.

REVISIONS TO THE AGENDA -In accordance with §54954.2(a) of the Government Code (Brown Act), revisions to this Agenda may be made up to 72 hours before the Board Meeting, if necessary, after mailings are completed. Interested persons wishing to receive a copy of the set Agenda may pick one up at the District's Main Office, located at 560 Magnolia Avenue, Beaumont, California, up to 72 hours prior to the Board Meeting.

REQUIREMENTS RE: DISABLED ACCESS - In accordance with §54954.2(a), requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Board Secretary, Melissa Bender, at least 48 hours in advance of the meeting to ensure availability of the requested service or accommodation. Ms. Bender may be contacted by telephone at (951) 845-9581, Ext. 24, email at melissa.bender@bcvwd.org or in writing at the Beaumont-Cherry Valley Water District, 560 Magnolia Avenue, Beaumont, California 92223.



**Beaumont-Cherry Valley Water District
Regular Board Meeting
June 11th, 2014**

DATE: May 8th, 2014
TO: Board of Directors
FROM: Eric Fraser, General Manager
SUBJECT: Consideration of Annexation of Parcel for ASM Beaumont Business Center Development (located South of State Route 60/West of Potrero Road) and Approval of Water Service "Will Serve Letter"

Recommendation

Consider approval of annexation of the ASM Beaumont Business Center Development, Riverside County Assessor's Parcel No. (APN) 421-020-003 and provide water service ("Will Serve Letter") to the proposed Development.

This Development occupies one of four properties related to the original Hidden Canyon II Development which was brought to the Board for consideration on November 14, 2012 and tabled at that time until the completion of the District's 2013 Urban Water Management Plan (UWMP) Update. Said 2013 UWMP Update was completed in July 2013.

The Project is still subject to final City of Beaumont approval regarding the proposed land use change (once annexed into the City) and conformity with CEQA. In the event the project does not obtain approval, CEQA conformity, or there is an increase in proposed water use, the Project will be required to be re-submitted to the Board of Directors of the Beaumont-Cherry Valley Water District for re-approval.

In the event the requested annexation and the will serve letter are approved, said "Will Serve Letter" will stipulate the proposed water supply for the ASM Beaumont Business Center Development shall not exceed 22,000 gallons per day (22.41 acre feet per year or 34 Equivalent Dwelling Units) demand.

Background

The Applicant (Applied Planning, Inc.) has requested annexation to the District service area and water service for approximately 36.58 gross acres of land which is a part of the Hidden Canyon II project described above. The attached Figure 1.3-1 identifies the revised projects regional location, Figure 1.3-2 identifies the proposed ASM Beaumont Business Center Development, Figures 1.3-3 and 1.4-1 identify the project area as it relates to the original Hidden Canyon II project, and Figure 1.4-2 presents the planned building development for the project site.

The ASM Beaumont Business Center Development consists of a part of the Hidden Canyon II Development which is identified in an approved Mitigated Negative Declaration Document (MND, State Clearinghouse No. 2007091141) which was adopted by the City in January of 2008.



The ASM Beaumont Business Center project area is comprised of the parcel identified by Riverside County as Assessor's Parcel Number (APN) 421-020-003 which is 36.58 acres and includes approximately 24.31 acres available for the proposed development. The remaining 12.57 acres is designated as Caltrans right-of-way, and is located south west of and adjacent to the proposed Potrero Boulevard and State Route 60 interchange.

The Applicant proposes that the City of Beaumont and the District concurrently annex the ASM Beaumont Business Center property to both entities and has prepared preliminary annexation and plan of service documents which upon Board approval will require the District's General Manager's review, approval, and signature.

The ASM Beaumont Business Center Project provides for the development of a 500,000 square foot commercial/industrial use facility.

Information provided by the Applicant for the development identifies the proposed water system demands for the proposed 500,000 square foot commercial/industrial facility is 22.41 acre feet per year or approximately 34 EDU's as defined by the District (580 gallons per day per EDU).

Upon Board approval, District staff will assist the Applicant with completing preparation of the annexation documentation to the satisfaction of the District and as required for the concurrent City/District Annexation.

District staff will also prepare a "Will Serve Letter" which will include a maximum water supply stipulation to the ASM Beaumont Business Center project not to exceed the equivalent of 22,000 gallons per day or 34 EDU's.

Said "Will Serve Letter" will also identify that the District recognizes that the Project is still subject to final City approval regarding the proposed land use change (once annexed into the City of Beaumont) and conformity with CEQA. Said "Will Serve Letter" will also stipulate that in the event the project does not obtain City approval as described herein, CEQA conformity, or there is an increase in proposed water use, the Project will be required to be re-submitted to the Board of Directors of the Beaumont-Cherry Valley Water District for re-approval.

Staff further identifies that another previous request for annexation of these properties (together with additional parcels identified as APN's 421-030-003, 004, and 005) was twice presented to the Board of Directors at the July 9, 2008, Regular Board Meeting and subsequently at the September 10, 2008, Regular Board Meeting. The request for annexation was tabled at the first meeting until a water supply assessment could be provided. The request was again tabled at the second meeting. The Board's direction to the General Manager and the District Engineer at that time was to update the Urban Water Management Plan (UWMP) and the 1994 District's Master Plan and bring back said items to the Board for consideration. At this time, work related to the 2013 UWMP Update has been completed and accepted. The Master Plan Update is still in progress and has not been completed or accepted. However, based on the estimated water demand of 34 EDUs, overall impact to the District is minimal and will be mitigated through the conditions of approval identified in the facilities agreement and as described hereafter.

The total new water demand required by the project will be approximately 34 EDUs. This new water demand to the local water supply will need to be provided by imported water via the San Geronio Pass Water Agency and new non-potable water resources available from YVWD or possibly the City of Beaumont.



Conditions;

Prior to final project development the following conditions must be met:

1. The Applicant shall enter into a water facilities extension agreement and pay all fees associated with the domestic and non-potable water services for the development. The Applicant shall also pay all fees related to new fire service facilities including any facilities improvements that may be necessary to meet the fire flow requirements.
2. The Applicant shall pay front footage fees along all property frontages where facilities are currently installed.
3. The Applicant shall extend existing facilities along all property frontages where facilities are planned but not currently installed.
4. The Applicant shall connect to the recycled water system for irrigation supply. To minimize the use of potable water, the District requires the applicant conform to the City of Beaumont Landscaping Ordinances and Zoning Requirements and/or County of Riverside Landscaping Ordinances (as applicable) which pertains to water efficient landscape requirements and the following:
 - a. Landscaped areas which have turf shall have "smart irrigation controllers" which use Evapotranspiration (ET) data to automatically control the watering. Systems shall have an automatic rain sensor to prevent watering during and shortly after rainfall and automatically determine watering schedule based on weather conditions, and not require seasonal monitoring changes. Orchard areas, if any, shall have drip irrigation.
 - b. Landscaping in non-turf areas should be drought tolerant consisting of planting materials. Irrigation systems for these areas should be drip or bubbler type.
5. The Applicant shall prepare separate water improvement plans and non-potable water improvement plans for the project as well as required water main and non-potable water main pipeline extensions in accordance with current District Standards showing all required domestic water system and non-potable water system improvements. Said plans shall be approved by the District prior to construction.
6. The Applicant shall conform to all District requirements and all City of Beaumont requirements.

Financial Impact

There will be no fiscal impact to the District as all fees for annexation and required facility installation costs will be paid for by the Applicant.

Report prepared by: Dan Jagers, Director of Engineering

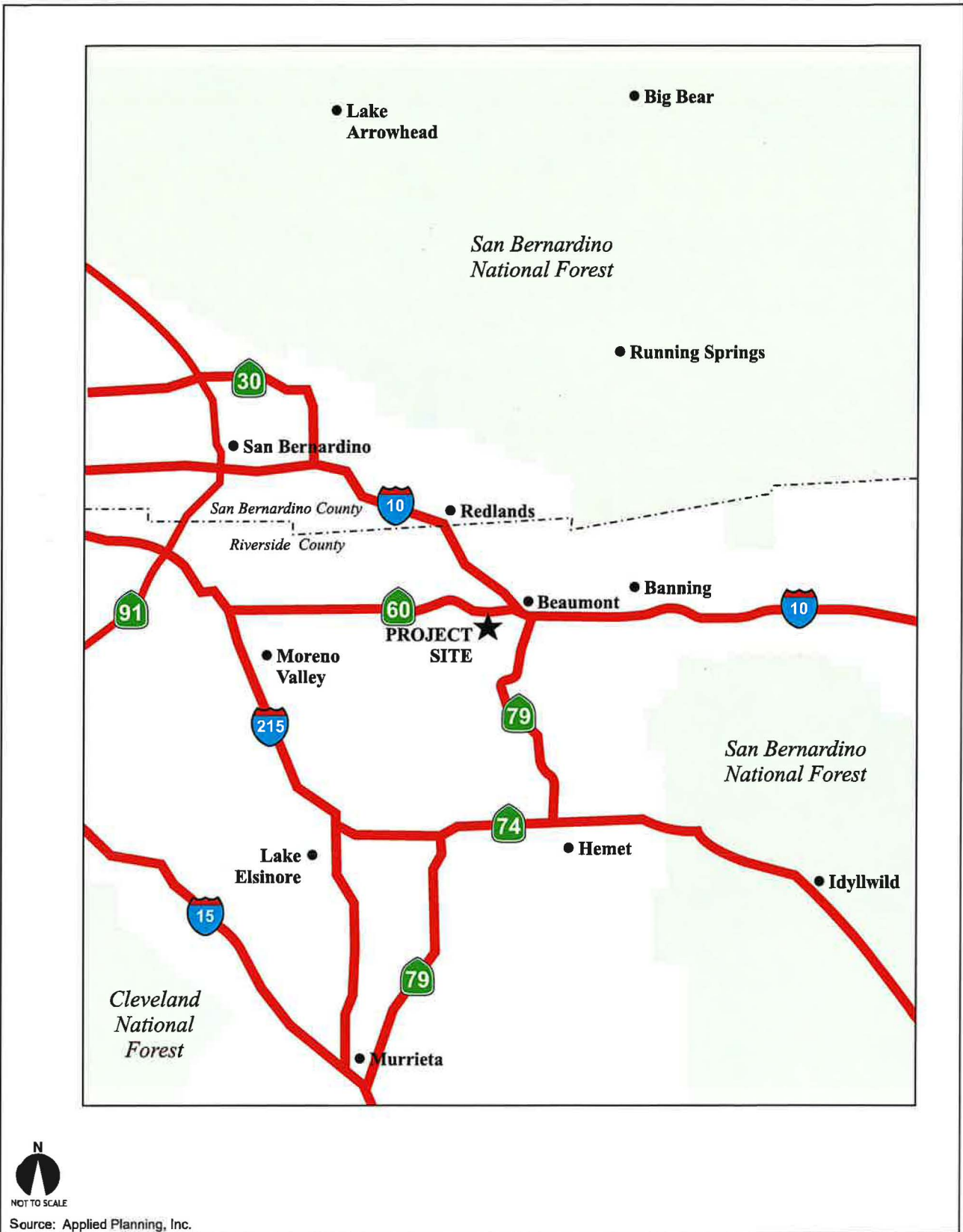


Figure 1.3-1
Regional Location



NOT TO SCALE

Source: Google Earth; Applied Planning, Inc.



Figure 1.3-2
Annexation Area Vicinity

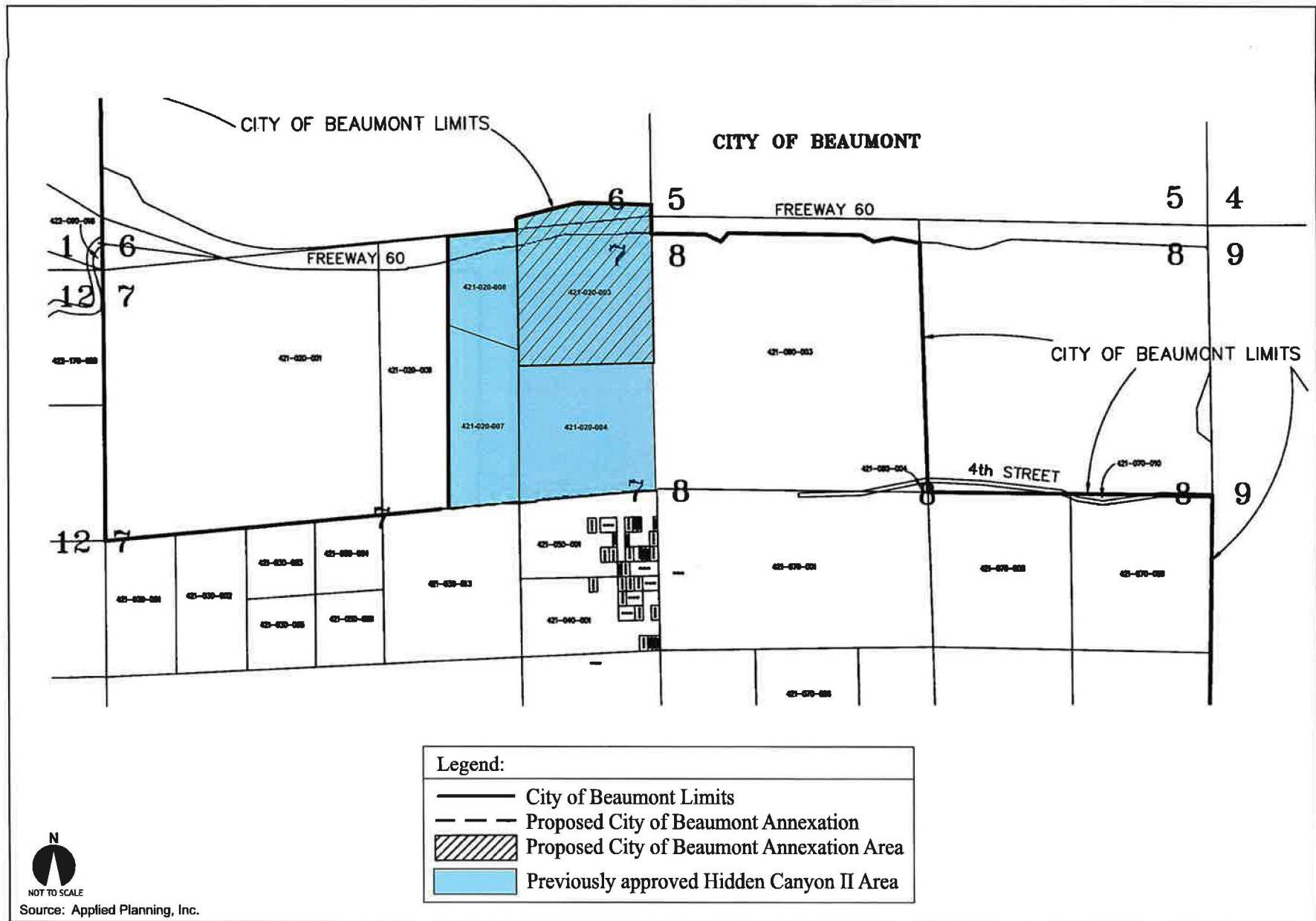
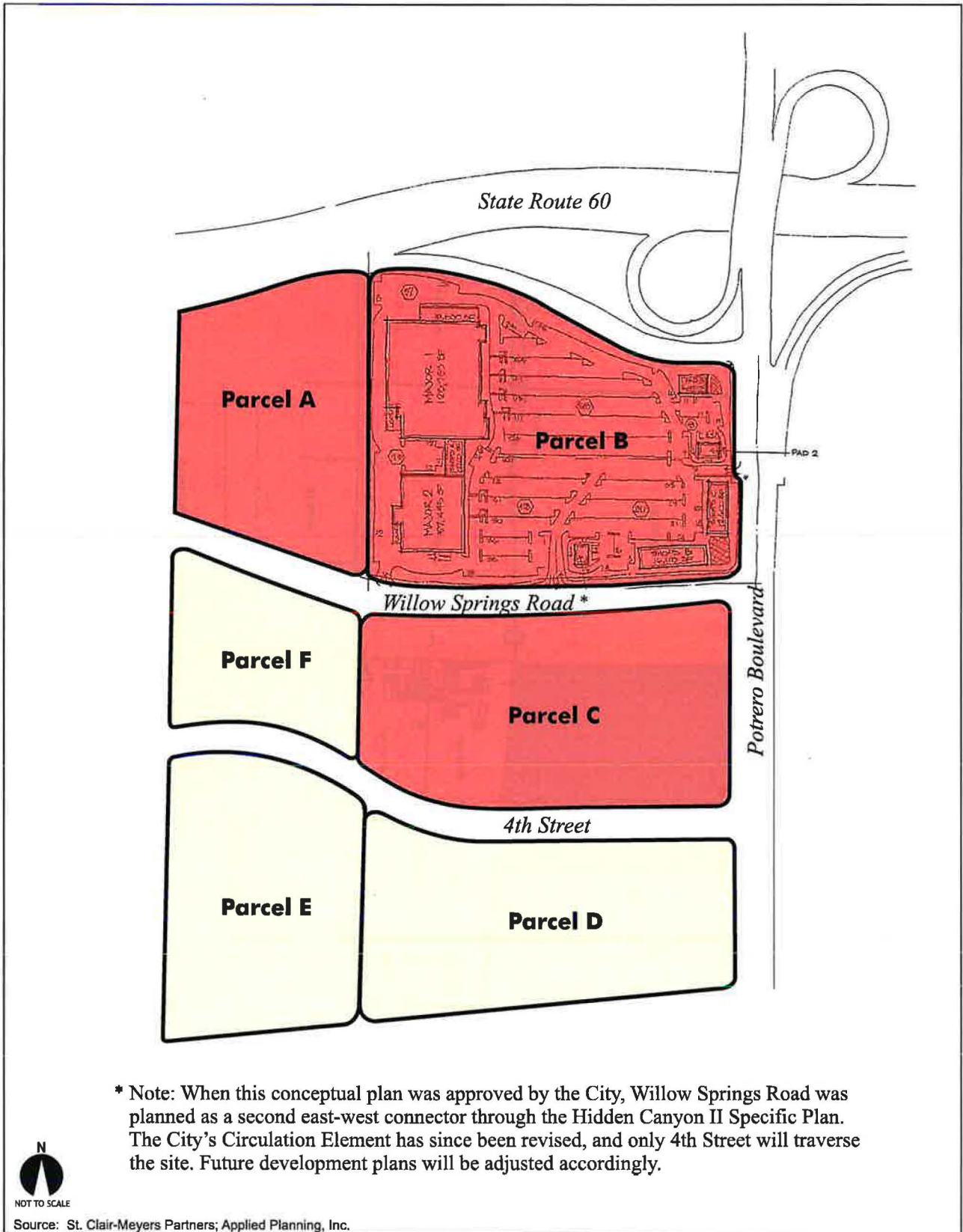
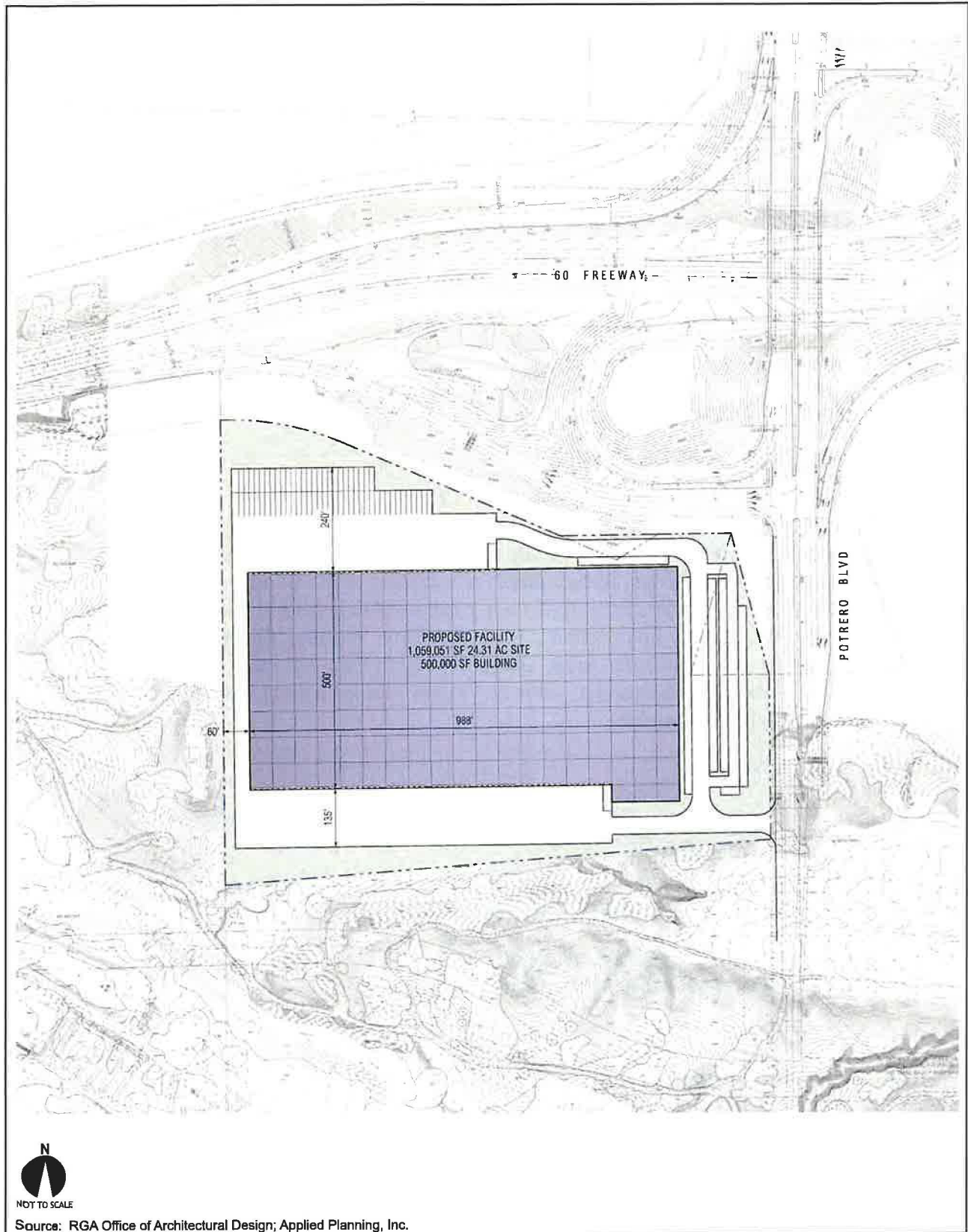


Figure 1.3-3
Annexation Area Boundaries







**BEAUMONT-CHERRY VALLEY WATER DISTRICT
MINUTES OF THE
REGULAR MEETING OF THE BOARD OF DIRECTORS
560 Magnolia Avenue, Beaumont, CA 92223
Wednesday, June 11th, 2014**

Call to Order, President Woll

President Woll began the meeting at 7:14 p.m.

Pledge of Allegiance, Director Ball

Director Ball led the pledge.

Invocation, Director Ross

Director Ross led the invocation.

Roll Call

Present at the meeting were President Woll, Directors Ball, Guldseth, Ross and Slawson. Legal Counsel: James Markman. District Staff: General Manager: Eric Fraser, Director of Operations: Tony Lara, Director of Engineering: Dan Jagers, and Director of Finance and Administrative Services: Melissa Bender. Public that registered their attendance were: Barbara Voight, Fran Flanders, Patsy Reeley, Barbara Brown, David Castaldo, John M. Halliwill, Nancy Carroll, MaryAnn Melleby, Pat Doherty and Brian Hall.

Public Comment

David Castaldo thanked Director Ross for participating in the City of Beaumont's video regarding water conservation.

Nancy Carroll, a member of the Gateway Committee, thanked the Board for considering the Gateway Resolution (Resolution 2014-03) on tonight's agenda.

Judy Bingham expressed her disappointment in Director Ross's participation in the City of Beaumont water conservation video.

ACTION ITEMS

1. Adoption of the Agenda (pages 1-3)

General Manager Fraser advised the Board that there were no changes to the Agenda.

- 2. Consent Calendar:** All matters listed under the Consent Calendar are considered by the Board of Directors to be routine and will be enacted in one motion. There will be no discussion of these items prior to the time the Board considers the motion unless members of the Board, the administrative staff, or the public request specific items to be discussed and/or removed from the Consent Calendar.

- a. April 2014 Budget Variance Report Review** (pages 4-8)
- b. April 30th, 2014 Cash/Investment Balance Report** (page 9)
- c. May 2014 Check Register Review** (pages 10-22)
- d. May 2014 Invoices Pending Approval** (pages 23-34)
- e. Minutes of the Regular Meeting May 14th, 2014** (pages 35-39)

The consent calendar passed 5-0 with no items being pulled for discussion.

3. Continued Discussion Related to Current Drought Conditions and Review of the District's Water Supply Reliability and Water Shortage Contingency Planning Guidelines as Set Forth in Section 5 of the District's 2013 Urban Water Management Plan (pages 40-81)**

General Manager updated the Board on details of Governor Brown's Executive Order on Reduction Requirements and the District's Water Supply Reliability and Water Shortage Contingency Planning Guidelines as Set Forth in Section 5 of the District's 2013 Urban Water Management Plan Update.

After discussion, Director Slawson motioned to initiate Stage 1 of the Stages of Action in Response to Water Supply Shortages as set forth in Section 5 of the District's 2013 Urban Water Management Plan and to send the letter as an insert with the next two billing cycles. Director Ball seconded the motion and it passed 5-0.

4. Discussion Regarding the Board's Responsibility in Regards to Land Planning (page 82)**

Public Comments on Item:

Patsy Reeley advised the Board that she believes the Board has to be involved and active in land planning decisions because they have a responsibility to assure there is enough water for the community.

Legal Counsel Markman reminded the Board that the City of Beaumont or the County of Riverside are the land planning agencies for the area and that the Board really doesn't have direct control of land planning decisions. The Board does however have a direct responsibility to prepare a 20 year water supply assessment when applicable.

After discussion, the Board stated they would like to be work with the City of Beaumont to become more involved during the land planning process to reach a unified position and consider the opinions of the community before land planning decisions are made.

Beaumont City Council Member David Castaldo stated he has asked his Council three times over the last year to work with the District to resolve these issues. He recommends the Board ask the City Council in the Public Forum.

5. Consideration of Resolution 2014-03 A Resolution of the Board of Directors of the Beaumont-Cherry Valley Water District Requesting the County of Riverside Board of Supervisors Oppose Proposed Zone Changes to the Riverside County General Plan (pages 83-84)**

Public Comments on Item:

Pat Doherty thanked the Board for their opposition to the proposed zone changes; however, he suggested the Board specifically state their concerns in the Resolution.

Patsy Reeley thanked the Board for their support of the issue and the Resolution.

Nancy Carroll, a member of the Gateway Committee, advised the Board that she really likes the Resolution as drafted and hopes they sign it.

After discussion, Director Ball motioned to approve the Resolution as drafted. The motion was seconded by President Woll and passed 5-0.

6. Discussion of Grand Avenue Storm Drain Project and Request for Board Direction Regarding Continued Project Development (pages 85-87)**

General Manager Fraser and Director of Engineering Dan Jagers provided an overview of the project development.

After discussion, General Manager Fraser stated the District staff will perform additional analysis and bring back a draft agreement to the Board for consideration if the Board desires. Director Ross motioned to approve the project for further analysis and to bring a draft agreement back to the Board for consideration. Director Guldseth seconded the motion and it passed 5-0.

7. Consideration of Annexation of Parcel for ASM Beaumont Business Center Development (located South of State Route 60/West of Potrero Road) and Approval of Water Service "Will Serve Letter"* (pages 88-95)**

Public Comment on Item:

Patsy Reeley urged the Board to postpone decision until there is more information available on the project and the drought is over. She wished the Board would have a policy to give their feedback on the water availability during the EIR during the CEQA process.

Judy Bingham stated she is opposed to the annexation and "Will Serve Letter."

Brent Caldwell, representative of the owners of ASM Beaumont, updated the Board on their development planning and thanked the Board for bringing the item back for consideration.

After discussion, Director Slawson motioned to approve the annexation and "Will Serve Letter" request, Director Ross seconded the motion. The motion passed 4-0, with Director Guldseth abstaining.

8. Consideration of Annexation of Parcels for Revised Hidden Canyon II Development (located South of State Route 60/West of Potrero Road) and Approval of Water Service "Will Serve Letter"* (pages 96-100)**

Public Comment on Item:

Judy Bingham and Patsy Reeley both spoke in opposition to the annexation and "Will Serve Letter."

Brian Hall and David Golkar spoke in favor of the project.

After discussion, Director Slawson motioned to approve the annexation and "Will Serve Letter" request, Director Ross seconded the motion. The motion passed 3-1, with Director Ball dissenting and Director Guldseth abstaining.

9. Consideration of Approval of Water Service "Will Serve Letter" for the proposed Country Club Village Development (pages 101-109)**

Public Comment on Item:

Patsy Reeley and Judy Bingham both spoke in opposition to the annexation and "Will Serve Letter."

David Golkar spoke in favor of the project.

After discussion, Director Slawson motioned to approve the "Will Serve Letter" request, Director Ross seconded the motion stating that these approvals are dependent upon the San Gorgonio Pass Water Agency (SGPWA) performing their function of importing the water necessary to meet the demand. SGPWA Board Member Barbara Voight then stated from the audience that if the Board approved the will serves, they would be responsible for providing the water. The motion passed 3-2, with Directors Ball and Director Guldseth dissenting.

10. Reports for Discussion

a. Ad Hoc Committees

No reports were made.

b. General Manager

General Manager Fraser provided an update on the following topics:

- *San Gorgonio Pass Water Agency recently updated their Urban Water Management Plan to reflect the demands in BCVWD's most recent UWMP. Mr. Fraser expressed concern about the comment made by the SGPWA Board Member Voight since it is in direct conflict with recent policy adopted by the SGPWA and associated statements regarding the Agency's role in providing imported water supply to the region. He further stated if the SGPWA is unwilling to meet the needs of the agencies in their service area, then the agencies may need to reconsider the SGPWA's role as the wholesale water agency for the region;*
- *District's audit to be presented at next Board meeting;*
- *Continue to take water deliveries at the Noble Creek Recharge facility as water is available;*
- *Fire in Bogart Park: Mr. Fraser thanked staff members Lara and Dahlstrom for monitoring the District's facilities to ensure water supply needs were met for fire fighting operations;*

- *Master Plan progress continues: Mr. Fraser thanked District staff Jagers and Reichenberger for their good work and anticipates having a final product before the end of the year; and*
- *GIS project is nearly complete: Staff is already making use of the features and resources available.*

c. Directors Reports

Directors Ross and Slawson attended the City of Beaumont's State of the City meeting. Director Ball attended the Regional Alliance meeting. Director Guldseth thanked David Castaldo and District staff for their presentation at the Alliance meeting held early today.

President Woll had nothing to report.

d. Legal Counsel Report

Mr. Markman had nothing to report.

11. Announcements

- *Beaumont Basin Watermaster meeting, tentatively scheduled, July 2nd, 2014 at 10:00 a.m.*
- *Finance & Audit Committee meeting, July 3rd, 2014 at 3:00 p.m.*
- *Regular Board meeting, July 9th, 2014 at 7:00 p.m.*
- *Beaumont Basin Watermaster meeting, August 6th, 2014 at 10:00 a.m.*
- *Finance & Audit Committee meeting, August 7th, 2014 at 3:00 p.m.*
- *Regular Board meeting, August 13th, 2014 at 7:00 p.m.*

President Woll made the announcements above.

12. Action List for Future Meetings

- *Schedule a workshop to discuss the landscape for the Noble Creek Recharge Phase II Project with the public*
- *Update the Board on Infosend after one year*
- *Solar System Update*
- *Storm Water Recapture Project*

13. Recess to Closed Session

- a. *Conference with Labor Negotiators pursuant to Government Code 54957.6:*

Agency Negotiator: Eric Fraser

Represented Employees: BCVWD Employee Association

Item 15 was pulled from the agenda by General Manager Fraser.

14. Adjournment

President Woll adjourned the meeting at 9:17 p.m.

Attest:

Director Ryan Woll, President of the
Board of Directors of the
Beaumont-Cherry Valley Water District

Director Daniel Slawson, Secretary to
the Board of Directors of the
Beaumont-Cherry Valley Water District

** Information included in the agenda packet