

Appendix O-3: Water Supply Assessment

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WATER SUPPLY ASSESSMENT FOR THE GREEN RIVER RANCH BUSINESS PARK

Approved: June 2024

**Prepared by
Michael Baker International**



A handwritten signature in blue ink, appearing to read "Alex Maher", written over a horizontal line.

Alexander S. Maher, P.E. - Preparer

Date: June 5, 2024

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Reference Documents

The documents listed in this section are cited throughout the WSA. In the interest of concision, references are made to these documents, but the documents and associated content are not reproduced herein. For additional insight into the basis of the citations, the reader is encouraged to acquire and review the references.

For each reference document, the following are provided to assist the reader:

- Title
- Hyperlink (if available)
- Abbreviated Title for Citation
- Brief description of purpose and content

2020 Urban Water Management Plan

City of Corona 2020 Urban Water Management Plan, Volume 1 – Report and Volume 2 - Appendices (June 2021)

<https://www.coronaca.gov/home/showpublisheddocument/20292/637612402713400000>

Abbreviated Title for Citation: UWMP

This report was prepared in compliance with the California Water Code and the Urban Water Management Planning Act as set forth in the 2020 Urban Water Management Plans Guidebook for Urban Water Suppliers established by the Department of Water Resources (DWR). It provides a review of water supply reliability for existing (2020) and future (through 2045) conditions with the City's Water Service Area as well as water conservation, energy use and contingency planning. Volume 1 includes analysis and Volume 2 include supporting documentation.

The UWMP is intended as a source of information for the preparation of Water Supply Assessments in accordance with SB 610. All topics related to existing and projected water supply and demand for the City are covered in detail and were thoroughly vetted by City staff prior to adoption by the City Council in 2021.

As a convention, applicable excerpts are taken directly from the UWMP. These excerpts are in units of acre-feet per year (AFY).

Corona General Plan 2004

<https://www.coronaca.gov/home/showdocument?id=4637>

Abbreviated Title for Citation: General Plan

The General Plan for the City of Corona presents a vision for the City's future and a strategy to make that vision a reality. The Plan is the result of thousands of hours of research and technical studies, the collective efforts of the diversity of elected decision-makers, individuals, and agencies who cumulatively guide and shape land use development and natural resource conservation, and the engagement of numerous individuals throughout the community who have articulated their hopes and expectations for the City's future.

Green River Ranch Specific Plan SP00-001 (February 21, 2001)

<https://www.coronaca.gov/home/showpublisheddocument/1910/636124331790000000>

Abbreviated Title for Citation: Specific Plan

The Green River Ranch Specific Plan, which was prepared in accordance with the City's General Plan, sets forth the overall policies, plans and regulations guiding existing and future development within the Green River Ranch community. The Specific Plan envisions the continuation of an established residential area having more rural characteristics than the balance of the City. This rural/urban character is a unique aspect which the Specific Plan is designed to preserve and compliment, while also seeking to enhance public services and facilities in the area. The Green River Ranch Plan also recognizes the valuable mineral resources in the area and provides for the continuance of extraction operations, in accordance with approved permits. In addition, the Green River Ranch Specific Plan provides policies and standards for new development, allowing for a compatible transition of uses while encouraging a well-designed and attractive community.

The policies, standards and provisions of the Specific Plan have been prepared especially for the Green River Ranch area and serve to link the existing land uses and zoning controls in place under the County's jurisdiction with the provision of services and land use entitlements to be established under the City of Corona's jurisdiction.

Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/Water-Use-And-Efficiency/Files/DT-SB-610-SB-221-PDF.pdf>

Abbreviated Title for Citation: Guidebook

The California Department of Water Resources provides assistance to water agencies in implementing the Urban Water Management Planning Act, which is one of the statutes amended by SB 610. The Urban Water Management Plan and Urban Water Shortage Contingency Analysis, are also referenced in SB 221. As part of its assistance responsibility, DWR has prepared this guidance to assist water suppliers to prepare the water assessments and the written verification of water supply availability required by SB 610 and SB 221, respectively.

Environmental Impact Report

Per the Green River Ranch Specific Plan (page 7):

An Environmental Impact Report (EIR) was prepared concurrently with the Green River Ranch Specific Plan in accordance with the provisions of the California Environmental Quality Act (CEQA). The Environmental Impact Report identified potential impacts resulting from project implementation along with appropriate mitigation measures to reduce those impacts.

The City was the lead agency responsible for EIR, and a copy of the original document is available in the County archives. The following documents were prepared by the City for the Green River Ranch Specific Plan and are provided in Appendix A:

City of Corona Final Environmental Impact Report (FEIR) SCH Number 1999091143 (03/29/2001)

Abbreviated Title for Citation: EIR

The Environmental Impact Report consists of a series of documents related to potential impacts of implementation of the Green River Ranch Specific Plan. The EIR provides an opportunity for the public and for decisions-makers to review potential impact of a project prior to approval.

City of Corona Water Master Plan (September 2005)

Available upon request from City of Corona Department of Public Works

Abbreviated Title for Citation: WMP

The Water Master Plan is an engineering document providing analysis of and recommendations for water system improvements related to capacity and performance.

City of Corona 2018 Reclaimed Water Master Plan

Available upon request from City of Corona Department of Public Works

Abbreviated Title for Citation: RWMP

The Reclaimed Water Master Plan is an engineering document providing analysis of and recommendations for reclaimed water system improvements related to capacity and performance. Specifically, the RWMP provides guidance for implementation of the City's Reclaimed Water Ordinance.

Abbreviations and Acronyms

As a convention, abbreviations and acronyms are introduced in parentheses following the subject term. Then, the abbreviation or acronym is used thereafter.

Below is a list of common abbreviations and acronyms appearing in this report.

AFY	acre-feet per year
CEQA	California Environmental Quality Act
DWR	Department of Water Resources
EIR	Environmental Impact Report
GDP	Gallons Per Day
KSF	Thousand Square Feet
PWS	Public Water System
RWMP	Reclaimed Water Master Plan
SB	Senate Bill
UWMP	Urban Water Management Plan
WMP	Water Master Plan
WMWD	Western Municipal Water District
WSA	Water Supply Assessment

Comprehensiveness Checklist

To assist the reader, the checklist below demonstrates the Water Supply Assessment is comprehensive in addressing the SB 610 statute.

Item	Response	Page	Comment
Is the project subject to CEQA? Water Code §10910(a)	Yes	5	SCH#1999091143 and related amendments
Is the development a “project” as defined by Water Code §10912(a) or (b)?	Yes	5	See §10912(a)(5)
Is there a public water system for the project?	Yes	6	City of Corona: PWS 3310037
Has an assessment already been prepared that includes this project?	No	8	Specific Plan and EIR predate SB 610. A WSA is now required.
Is there an adopted urban water management plan?	Yes	9	City of Corona 2020 UWMP, adopted June 16, 2021P
Is the water demand for the Project accounted for in the most recent UWMP?	No	9	Demand must be calculated independently.
Does the assessment rely on supplies never before used?	No	11	Only existing sources are considered.
Does the City rely on wholesale water?	Yes	11	The City is a member agency of Western Municipal Water District.
Does the City rely on groundwater?	Yes	12	The City pumps from the Coldwater and Temescal Basins.
Is there sufficient water supply to support the Project?	Yes	27	Surplus supply under all conditions through 2040.
Does the assessment recommend approval of the Project with respect to supply availability?	Yes	29	Surplus supply under all conditions through 2040.

Executive Summary

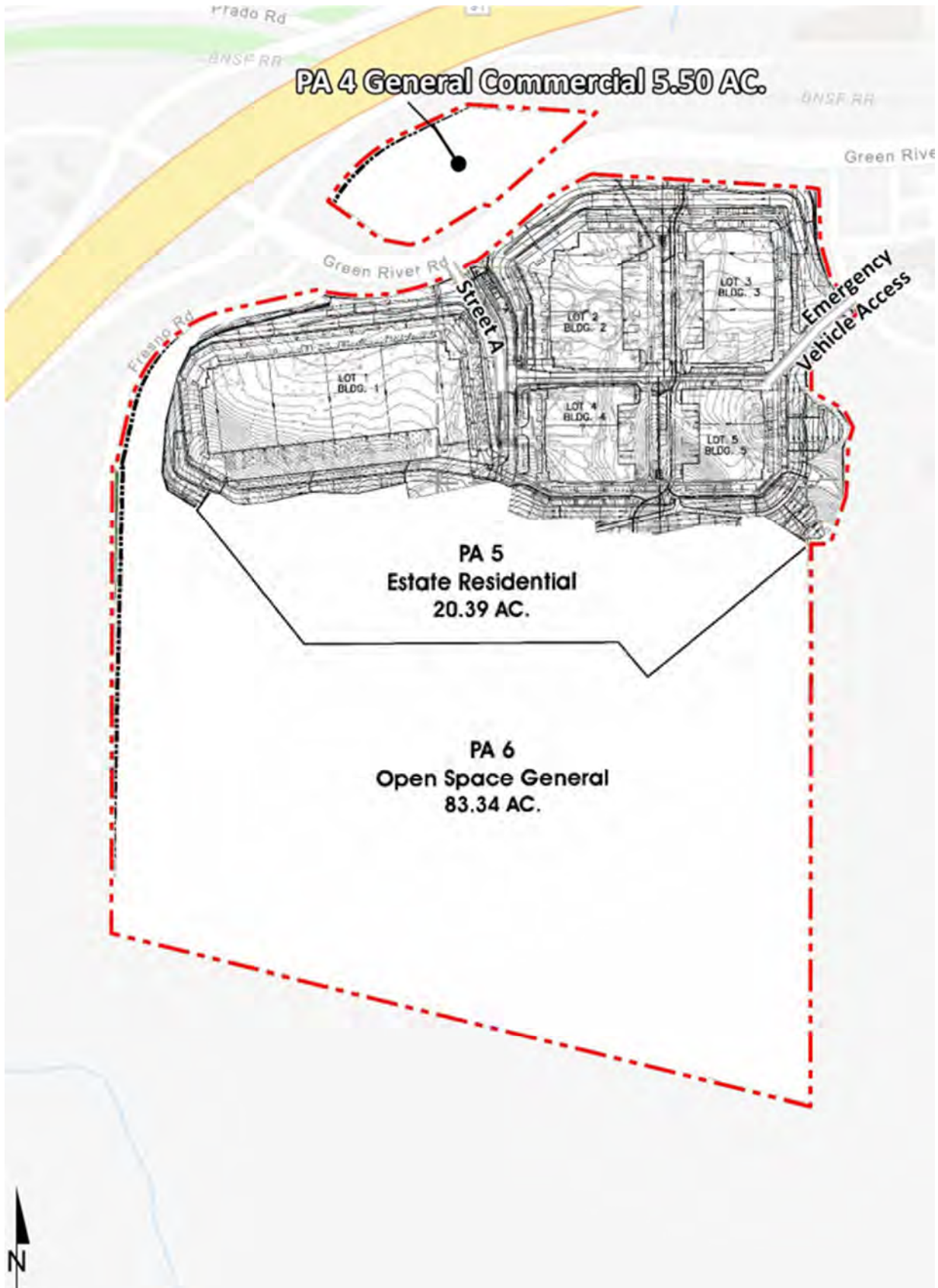
Background

This Water Supply Assessment (WSA) is a revised document to the previous version that was submitted on June, 2021. Upon City of Corona's request to add new land uses to this project. Michael Baker is providing this revised report to update the WSA with the new supply and demand analysis. Michael Baker also updated this report based on 2020 UWMP. The new demands associated with new land uses are discussed in Section 5, Step three. The new land uses are summarized below and are cumulative with the demands estimated in the 2019 WSA:

- Gas Station with Convenience Market with 12 vehicle fueling positions and 2,500 square feet of Fast-Food Restaurant
- For Buildout PA 5, addition of 32 new residential estate lots

This Water Supply Assessment (WSA) is required per Senate Bill 610 and intended to assist the Corona City Council in making an informed decision regarding approval of the Green River Ranch Business Park development (Project) with respect to the availability of water resources.

The Project, shown below, is located in Corona at the southwest corner of Green River Road and Dominguez Ranch Road. It is generally bounded by Green River Road to the north, Dominguez Road to the east, Fresno Road to the west and mountain slopes to the south.



The Project is zoned M-4 (Industrial Park Zone) and specific plan zoned MU (Mixed Use) and featuring 5 Industrial Warehouse buildings on gross site area of 52.46 acres, with net development area of 37.82 acres with a total of 746,330 square feet of industrial floor space.

Analysis

Analysis is based on the *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001* (Guidebook). The Guidebook provides a methodology to determine whether supply is sufficient to meet demand under normal year, single dry year and multiple dry conditions for the next 20 years.

Existing and projected supply and demand were taken from the *City of Corona 2020 Urban Water Management Plan* (UWMP).

Calculation and projection of the incremental increase in demand associated with the Project were based on a number of factors, including:

- Project phasing
- Consistency with similar existing General Industrial customers along Prado Road on the north side adjacent to the project
- Water use reduction to account for installation of efficient fixtures per the Building Code
- Water use reduction to account for changing economic conditions in the future
- Variation in irrigation demand due to meteorological conditions
- Use of reclaimed water for irrigation and dual plumbing

Based on the factors listed above, demand varies from 102.09 acre-feet per year (AFY) [Project under normal conditions in 2020] to 112.76 AFY [Project in the third year of a multi- year drought in 2025].

Under all conditions required for review by the Guidebook, there is sufficient supply to meet the demand requirements of the Project.

Recommendation

Based on the finding that there is sufficient supply under normal year, single dry year and multiple dry year conditions through 2045, the City should approve the Green River Ranch Business Park development with respect to the availability of water resources.

Introduction

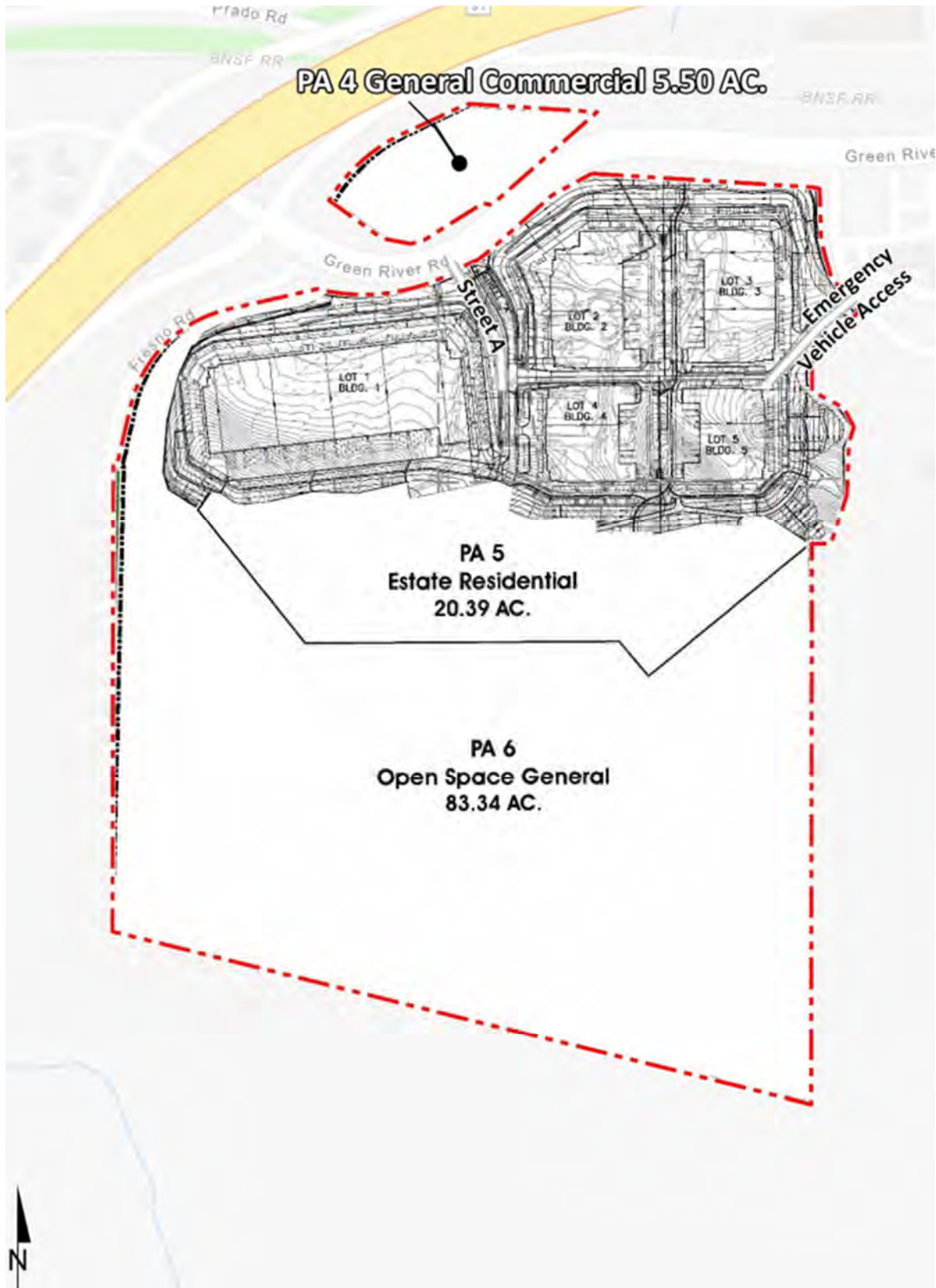
General Description

The Green River Ranch Business Park development is proposed to be constructed in one phase. Figure 1 shows a map of the development. Table 1 provide statistics taken or derived from the map that are relevant to this Water Supply Assessment (WSA).

Table 1 – Development Statistics

Phase	Area (acres)	Floor Space (square feet)	Estimated Landscaping (square feet)	Estimated Slope Control (square feet)
Project	52.46	746,330	514,305	671,799
Total	52.46	746,330	514,305	671,799

Figure 1 – Development Map



Purpose

This Water Supply Assessment is intended to assist the Corona City Council in making an informed decision regarding approval of the Green River Ranch Business Park development with respect to the availability of water resources.

Organization of Report

The major sections of this Water Supply Assessment are organized according to the *Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001* (Guidebook) prepared by the Department of Water Resources (DWR). The Guidebook is driven by statute. At the beginning of each section, the portion of the Water Code being addressed within the section is provided to assist the reader in understanding the intent of the legislature.

To reduce the length of this report, citations are provided throughout as taken from the sources in the Reference Documents section rather than duplicating them here.

Section 1 – Applicability of SB 610

SB 610

Water Code section 10910

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

Water Code section 10912

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

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

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

(b) If a public water system has fewer than 5,000 service connections, then "project" means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

The Green River Ranch Business Park development qualifies as a "Project", per §10912(a)(5). The development is an industrial park occupying 37.82 acres and consisting of 746,330 square feet of floor space, both of which exceed the threshold for designation as a "Project". By convention, the Green River Ranch Business Park development is referred to hereafter as the Project.

The Project is subject to CEQA and is referenced in Environmental Impact Report SCH 1999091143, which was originally prepared By City of Corona for the Green River Ranch Specific Plan in 2001 and approved by Corona City Council in March 2001. The EIR information is provided in Appendix A.

Section 2 – Authority to Prepare the WSA

Water Code section 10910

(b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined in Section 10912, that may supply water for the project. If the city or county is not able to identify any public water system that may supply water for the project, the city or county shall prepare the water assessment required by this part after consulting with any entity serving domestic water supplies whose service area includes the project site, the local agency formation commission, and any public water system adjacent to the project site.

Water Code section 10912

(c) “Public water system” means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections. A public water system includes all of the following:

- (1) Any collection, treatment, storage, and distribution facility under control of the operator of the system which is used primarily in connection with the system.*
- (2) Any collection or pretreatment storage facility not under the control of the operator that is used primarily in connection with the system.*
- (3) Any person who treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.*

Water Code section 10910

- (c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).*
- (2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*

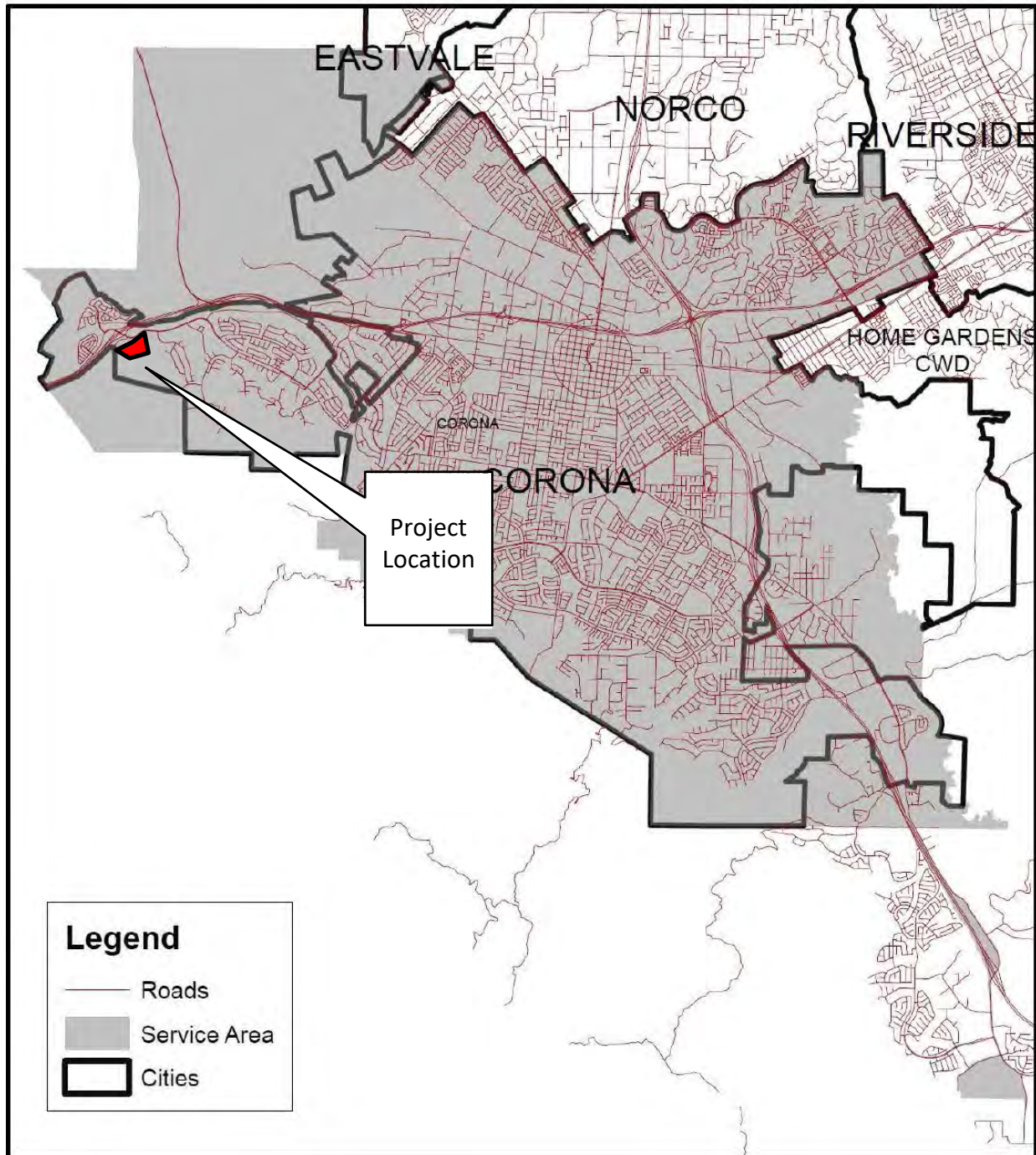
Water Code section 10910

- (g) (1) Subject to paragraph (2), the governing body of each public water system shall submit the assessment to the city or county not later than 90 days from the date on which the request was received. The governing body of each public water system, or the city or county if either is required to comply with this act pursuant to subdivision (b), shall approve the assessment prepared pursuant to this section at a regular or special meeting.*
- (2) Prior to the expiration of the 90 day period, if the public water system intends to request an extension of time to prepare and adopt the assessment, the public water system shall meet with the city or county to request an extension of time, which shall not exceed 30 days, to prepare and adopt the assessment.*
- (3) If the public water system fails to request an extension of time, or fails to submit the assessment notwithstanding the extension of time granted pursuant to paragraph (2), the city or county may seek a writ of mandamus to compel the governing body of the public water system to comply with the requirements of this part relating to the submission of the water assessment.*

The City of Corona is designated as Public Water System 3310037.

The Project is located within the City's Water Service Area, as shown in Figure 2.

Figure 2 – Water Service Area Boundary Map



[UWMP, page 3-2]

Section 3 – Review of Historical Planning Efforts Related to the Development

Water Code section 10910

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

- (1) Changes in the project that result in a substantial increase in water demand for the project.*
- (2) Changes in the circumstances or conditions substantially affecting the ability of the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), to provide a sufficient supply of water for the project.*
- (3) Significant new information becomes available which was not known and could not have been known at the time when the assessment was prepared.*

No previous Water Supply Assessment has been prepared that includes the Project.

Note that the Specific Plan and the EIR predate SB 610.

Section 4 – Use of the Urban Water Management Plan

Water Code section 10910

- (c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).*
- (2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*
- (3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.*
- (4) If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*

The City of Corona 2020 UWMP was adopted June 16, 2021. [UWMP, page 10-3]

The Specific Plan is referenced in the UWMP (page 3-7); however, demand associated with the Project was not accounted for as a future demand.

Section 5 – Required Information

Water Code section 10910

- (c) (2) *If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*
- (3) *If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.*
- (4) *If the city or county is required to comply with this part pursuant to subdivision (b), the water assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.*
- (d)(1) *The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.*
- (2) *An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:*
- (A) Written contracts or other proof of entitlement to an identified water supply.*
 - (B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.*
 - (C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.*
 - (D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.*
- (e) *If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water assessments.*

Table 2 is an excerpt from the UWMP (page 6-29) that shows the City’s existing and projected water supply.

Table 2 – Summary of Existing and Projected Supply in acre-feet per year (AFY)

Year	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Imported Water	18,005	21,110	21,110	21,110	21,110	21,110
Temescal Basin	16,239	13,000	13,000	13,000	13,000	13,000
Bedford-Coldwater Basin	0	2,112	2,112	2,112	2,112	2,112
Reclaimed Water	12,695	10,000	10,000	10,000	10,000	10,000
Total	46,939	46,222	46,222	46,222	46,222	46,222

[2020 UWMP, page 6-29]

This WSA relies entirely on existing supplies.

The City’s water supply portfolio includes imported water, groundwater from the Temescal and Coldwater Basins, and reclaimed water. The City has flexibility and discretion in the way it manages its supply portfolio. For purposes of this WSA, total supply is considered the sum of imported water, groundwater and reclaimed water resources, but does not consider these sources individually. It is the City’s responsibility to balance water supply and demand with the resources at its disposal.

In the steps that follow, additional detail is provided concerning the sources shown in Table 2.

Step One – Wholesale Water Supplies

The City is a member agency of the Western Municipal Water District (WMWD). WMWD is a local water wholesaler. Per the UWMP, the City received 18,005 acre-feet of imported water from WMWD in 2020.

Historical and projected wholesale supply availability from WMWD is provided in Table 3.

Table 3 – Summary of WMWD Imported Water Supply

Year	2020	2025	2030	2035	2040	2045
Imported Water (AFY)	18,005	21,110	21,110	21,110	21,110	21,110

[2020 UWMP, page 6-3]

Step Two – Groundwater Supplies

Water Code section 10910

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

- (1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.*
- (2) A description of any groundwater basin or basins from which the proposed project will be supplied. For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree. For basins that have not been adjudicated, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.*
- (3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.*
- (4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.*
- (5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by paragraph (4) of subdivision (b) of Section 10631.*

The City pumps groundwater from two local aquifers: the Coldwater Basin and the Temescal Basin.

Historical production from the Coldwater Basin is provided in Table 4.

Table 4 – Coldwater Basin Historical Pumping in AFY

Well	2016 (AFY)	2017 (AFY)	2018 (AFY)	2019 (AFY)	2020 (AFY)
Well #3	460	3	0	0	0
Well #20	0	0	0	0	0
Well #21	1,508	764	178	0	0
Totals	1,968	767	178	0	0

[2020 UWMP, page 6-10]

Historical pumping from the Temescal Basin is provided in Table 5.

Table 5 – Temescal Basin Historical Pumping in AFY

Well	2016 (AFY)	2017 (AFY)	2018 (AFY)	2019 (AFY)	2020 (AFY)
Well #7A	1,078	570	1,317	1,186	964
Well #8A	1,744	2,088	1,803	1,492	1,345
Well #9A	1,255	1,320	1,397	1,304	1,295
Well #11A	528	399	803	564	1,081
Well #12A	498	683	799	825	687
Well #13	28	0	0	0	0
Well #14	862	995	948	924	1,009
Well #15	1,099	1,265	882	1,330	1,249
Well #17A	1,202	1,027	1,016	624	827
Well #19	0	0	738	1,276	1,282
Well #22	2,197	2,070	2,242	2,068	1,917
Well #25	1,625	1,778	1,383	800	752
Well #26	174	0	0	0	13
Well #28	681	714	1,080	927	811
Well #27	413	264	432	319	729
Well #29	7	0	0	0	0
Well #31	0	0	621	981	836
Well #33	0	0	0	1,274	1,442
Totals	13,391	13,173	15,461	15,894	16,239

[2020 UWMP, page 6-10]

Historical (2020) and projected groundwater supply availability is provided in Table 6.

Table 6 – Summary of Groundwater Supply

Year	2020 (AFY)	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Bedford-Coldwater Basin	0	2,112	2,112	2,112	2,112	2,112
Temescal Basin	16,239	13,000	13,000	13,000	13,000	13,000

[2020 UWMP, page 6-11]

Step Three – Project Demand Analysis

Water Code section 10910

- (c) (2) *If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*
- (3) *If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.*

Water Code section 10631 (Urban Water Management Plan Requirements)

- (a) *Describe the service area of the supplier, including current and projected population, climate, and other demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.*
- (e) (1) *Quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors including, but not necessarily limited to, all of the following uses:*
- (A) *Single-family residential.*
 - (B) *Multifamily.*
 - (C) *Commercial.*
 - (D) *Industrial.*
 - (E) *Institutional and governmental.*
 - (F) *Landscape.*
 - (G) *Sales to other agencies.*
 - (H) *Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.*
 - (I) *Agricultural.*
- (2) *The water use projections shall be in the same five-year increments described in subdivision (a).*

The water demand for the Project was not explicitly accounted for in the 2020 UWMP. The UWMP only considered future demands associated with population growth and minor infill projects. For this reason, water demand for the Project is calculated independently below.

For purposes of this analysis, construction of the Project is assumed to begin within five years. The projected demand is calculated, accordingly.

Note that the City considers both potable water and reclaimed water as elements of its water supply portfolio in the UWMP. For this reason, both are calculated and considered as water demand for the Project. This WSA is a review of supply sufficiency only and does not include site-specific determination of the feasibility of using reclaimed water. As a non-potable source, the feasibility of implementing reclaimed water use is subject to a determination by the City Engineer. This WSA provides calculations for reclaimed water use by the Project for landscape irrigation and dual-plumbing as guidance to the City Engineer on application of recommendations in the RWMP. These calculations are for planning purposes only and do not constitute an obligation by the City or the developer to implement reclaimed water use or to what degree reclaimed water use will be implemented.

Total water demand for the Project was calculated and separated into potable water demand and reclaimed water demand by the following method:

- Recent City water use records for General Industrial land use were used to develop an area-based demand factor in terms of total water demand per acre.
- The demand factor was applied to the area of the Project to determine the gross water demand.
- Reclaimed water demand for irrigation and dual plumbing was calculated per guidance in the Reclaimed Water Master Plan. Reclaimed water demand for irrigation was increased under single dry year and multiple dry year conditions proportional to increases documented in the UWMP.
- Gross potable water demand is the gross water demand reduced by the reclaimed water demand.
- Potable water demand is the gross potable water demand reduced to account for installation of efficient plumbing fixture per the Building Code and reduced to account for the impact of wholesaler inflation on price elasticity.
- Total demand for the Project is the sum of the potable water demand and the reclaimed water demand.

Water demand for the newly proposed facilities in PA-4 and PA-5 is assumed to be 100% potable water demand.

Demand Factor

Water use records from January 2016 through December 2018 for 53 Light Industrial parcels in the vicinity of California Avenue between Rimpau Avenue and Ontario Avenue were analyzed to determine the average water use per acre.

The total existing Light Industrial area was calculated at 107.26 acres and the associated annual water demand was calculated at 181.25 acre-feet per year (AFY). This is equivalent to a factor of 1.69 AFY per acre:

$$\frac{181.25 \text{ AFY}}{107.26 \text{ acres}} \cong 1.69 \text{ AFY per acre}$$

For comparison, note that the Water Master Plan (page 6-9) provides a Water Unit Flow Factor for Light Industrial land use of 1,400 gallons per day per acre, which is equivalent to 1.57 AFY per acre. To be conservative, the demand factor of 1.69 AFY per acre based on recent City records governs.

Demand factors for the newly proposed development areas PA-4 and PA-5 would need to include gas station with convenience market, fast-food restaurant (drive through), and single-family residential land uses. The City of Corona does not publish water demand criteria for those, or similar, land use types; therefore, Michael Baker used the demand factors developed by a different public agency in a similarly developed area of southern California. Below is a list of the demand factors used to estimate water demands for Phase 1B:

- Gas Station with Convenience Market = 255 gpd/ksf
- Fast-Food Restaurant = 870 gpd/ksf
- Low Density Residential (Estates) = 294 gpd/DU

Application of Demand Factor to Project Area

Applying the demand factor to the Project area results in a total water demand of 88.66 AFY, as shown in Table 7.

Table 7 – Previous Total Demand for Project

Phase	Area (acres)	Demand Factor (AFY/acre)	Demand (AFY)
Previous Project	52.46	1.69	88.66
Total	52.46		88.66

Table 8 includes the revised total demand for the project based on the revised potable water demand that is presented in Table 12.

Table 8 – Revised Total Demand for Project

Phase	Demand (AFY)
Previous Project	88.66
PA-4 and PA-5 Demand	13.43
Total	102.09

Reclaimed Water Demand

Per Ordinance 2854, reclaimed water will be used to meet irrigation and toilet flushing (i.e. dual plumbing) demands for the previous Project. Calculations of these reclaimed water demands shown in Table 9 for the project. It is assumed that new demand for PA-4 and PA-5 will be 100% potable water.

Quantities for landscaping were estimated from based on Figure 1. Quantities for floor space were taken from Table 1. Unit Factors for reclaimed water demand were taken from the RWMP.

Table 9 – Project Reclaimed Water Demand

Reclaimed Water Use	Quantity	Unit	Unit Factor	Unit	Demand (AFY)
Landscape Irrigation	514,305	square feet of irrigable area	26.9	gallons per year per square foot of irrigable area	42.46
Slope Control	671,799	square feet of engineered slope	10.5	gallons per year per square foot of irrigable area	21.65
Dual Plumbing Toilet	746,330	square feet of floor space	1.18	gallons per year per square foot of floor space	2.70
Dual Plumbing Urinal	746,330	square feet of floor space	0.12	gallons per year per square foot of floor space	0.27
Total Reclaimed Water Demand for Project					67.08

Under single dry year conditions, irrigation demand for the Project is scaled up proportionally to the projected normal year and single dry year demand for 2020 from the UWMP:

$$\frac{\text{Single Dry Year Demand}}{\text{Normal Year Demand}} = \frac{39,358 \text{ AFY}}{37,555 \text{ AFY}} \cong 1.05$$

[UWMP, page 7-8 and page 7-9]

Similarly, under multiple dry year conditions, irrigation demand for the Project is scaled up proportionally to the projected normal year and each of the four multiple dry year demands for 2020 from the UWMP:

$$\frac{\text{First Multiple Dry Year Demand}}{\text{Normal Year Demand}} = \frac{38,382 \text{ AFY}}{37,555 \text{ AFY}} \cong 1.02$$

$$\frac{\text{Second Multiple Dry Year Demand}}{\text{Normal Year Demand}} = \frac{40,635 \text{ AFY}}{37,555 \text{ AFY}} \cong 1.08$$

$$\frac{\text{Third Multiple Dry Year Demand}}{\text{Normal Year Demand}} = \frac{42,212 \text{ AFY}}{37,555 \text{ AFY}} \cong 1.12$$

$$\frac{\text{Fourth Multiple Dry Year Demand}}{\text{Normal Year Demand}} = \frac{41,987 \text{ AFY}}{37,555 \text{ AFY}} \cong 1.12$$

[UWMP, page 7-8 and page 7-10]

Table 10 provides a summary of reclaimed water demand for the Project under normal, single dry year and multiple dry year conditions.

Table 10 – Reclaimed Water Demand for Normal, Single Dry and Multiple Dry Year Conditions

Demand Type	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Project Irrigation Demand	67.08	70.43	68.42	72.45	75.13	75.13
Project Dual Plumbing Demand	2.97	2.97	2.97	2.97	2.97	2.97
Total Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10

Note that for 2025 demand is considered for the Project.

Potable Water Demand

Potable water demand is estimated as the total water demand minus the reclaimed water demand.

Per the UWMP (page 4-7), Residential, commercial, institutional and industrial water use decreases annually at a rate of 0.2% as an elastic response to anticipated wholesale cost increases and installation of more efficient water fixtures per Ordinance No. 2962 as shown in Table 11.

Table 11 – Demand Reduction Due to Wholesaler Inflation

Year	2025	2030	2035	2040	2045
Percentage	1.0%	2.0%	3.0%	4.0%	5.0%

Table 12 summarizes the water demand based on the new land uses that provided by the City of Corona. Water demand factors were used from a local agency water demand report.

Table 12 – Revised Potable Water Demand for New Development Facilities

Buildout	Application	Land Use Type	Area (SF)	Average water Demand (gpd/ksf)	Dwelling Units	Average water Demand (gpd/du)	Water Demand (gpd)	Water Demand (AFY)
PA-4	Gas Station	Gas Station	1,560	255	-	-	398	0.45
	Fast-Food Restaurant	Fast Food Restaurant	2,500	870	-	-	2,175	2.44
PA 5	Residential Estate lots	Residential	-	-	32	294	9,408	10.55
Total							11,981	13.43

Table 13 provides a summary of projected potable water demand for the Project making allowances for the efficiency reduction and wholesaler inflation reduction. The Project Potable Demand is the reclaimed water demand from Table 9 subtracted from the water demand from Table 7 plus the new water demands calculated in Table 12.

Table 13 – Projected Potable Water Demand

Year	2025	2030	2035	2040	2045
Project Potable Demand	35.01	35.01	35.01	35.01	35.01
Wholesaler Inflation Reduction	(0.35)	(0.70)	(1.05)	(1.40)	(1.75)
Potable Water Demand	34.66	34.31	33.96	33.61	33.26

Note that for 2025 demand is considered for the Project.

Total Project Demand

Total project demand varies both by year due to the impacts of inflation and by response to weather. The following tables summarize these variations.

Table 14 provides the water demand for the Project is constructed within five years for comparison to existing supply conditions.

Table 14 – Total Project Demand in 2025

Demand in 2020	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10
Potable Water Demand	34.66	34.66	34.66	34.66	34.66	34.66
Total Water Demand	104.71	108.06	106.05	110.08	112.76	112.76

Table 15 provides the projected water demand for the Project in 2030 assuming Project is constructed within ten years.

Table 15 – Total Project Demand in 2030

Demand in 2025	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10
Potable Water Demand	34.31	34.31	34.31	34.31	34.31	34.31
Total Water Demand	104.36	107.71	105.70	109.73	112.41	112.41

Table 16 provides the projected water demand for the Project in 2035 assuming construction is complete.

Table 16 – Total Project Demand in 2035

Demand in 2030	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10
Potable Water Demand	33.96	33.96	33.96	33.96	33.96	33.96
Total Water Demand	104.01	107.36	105.35	109.38	112.06	112.06

Table 17 provides the projected water demand for the Project in 2040 assuming construction is complete.

Table 17 – Total Project Demand in 2040

Demand in 2035	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10
Potable Water Demand	33.61	33.61	33.61	33.61	33.61	33.61
Total Water Demand	103.66	107.01	105.00	109.03	111.71	111.71

Table 18 provides the projected water demand for the Project in 2045 assuming construction is complete.

Table 18 – Total Project Demand in 2045

Demand in 2040	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Reclaimed Water Demand	70.05	73.40	71.39	75.42	78.10	78.10
Potable Water Demand	33.26	33.26	33.26	33.26	33.26	33.26
Total Water Demand	103.31	106.66	104.65	108.68	111.36	111.36

Step Four – Dry Weather Supply

Water Code section 10910

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

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

Single dry year supply availability is provided in Table 19.

Table 19 – Single Dry Year Supply

Year	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Demand	39,358	39,581	39,842	40,051	40,192

[UWMP, page 7-9]

Multiple dry year supply availability is provided in Table 20.

Table 20 – Multiple Dry Year Supply

Year	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Year 1	38,382	38,599	38,854	39,057	39,195
Year 2	40,635	40,865	41,135	41,350	41,496
Year 3	42,212	42,452	42,731	42,955	43,107
Year 4	41,987	42,225	42,503	42,726	42,877
Year 5	38,757	38,977	39,234	39,439	39,579

[UWMP, page 7-9]

Step Five – Dry Weather Demand

Water Code section 10910

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

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

Water Code section 10631 (Urban Water Management Plan requirements)

- (c) *Describe the reliability of the water supply and vulnerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:*

- (1) An average water year.*
- (2) A single dry water year.*
- (3) Multiple dry water years.*

For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practicable.

Note: Water Code section 10632 requires that the Urban Water Management Plan include a water shortage contingency analysis.

Water Code section 10632 (Urban Water Management Plan requirements)

10632. The plan shall provide an urban water shortage contingency analysis which includes each of the following elements which are within the authority of the urban water supplier: (a) Stages of action to be undertaken by the urban water supplier in response to water supply shortages, including up to a 50 percent reduction in water supply, and an outline of specific water supply conditions which are applicable to each stage. (b) An estimate of the minimum water supply available during each of the next three water years based on the driest three-year historic sequence for the agency's water supply. (c) Actions to be undertaken by the urban water supplier to prepare for, and implement during, a catastrophic interruption of water supplies including, but not limited to, a regional power outage, an earthquake, or other disaster. (d) Additional, mandatory prohibitions against specific water use practices during water shortages, including, but not limited to, prohibiting the use of potable water for street cleaning. (e) Consumption reduction methods in the most restrictive stages. Each urban water supplier may use any type of consumption reduction methods in its water shortage contingency analysis that would reduce water use, are appropriate for its area, and have the ability to achieve a water use reduction consistent with up to a 50 percent reduction in water supply. (f) Penalties or charges for excessive use, where applicable. (g) An analysis of the impacts of each of the actions and conditions described in subdivisions (a) to (f), inclusive, on the revenues and expenditures of the urban water supplier, and proposed measures to overcome those impacts, such as the development of reserves and rate adjustments. (h) A draft water shortage contingency resolution or ordinance. (i) A mechanism for determining actual reductions in water use pursuant to the urban water shortage contingency analysis.

Normal year demand without considering the additional demand for the Project is provided in 21

Table 21 – Normal Year Demand without Project

Sector	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Residential Single Family	18,839	18,996	19,180	19,327	19,427
Residential Multi Family	2,523	2,544	2,569	2,589	2,602
Commercial/ Institutional	3,078	3,104	3,134	3,158	3,174
Industrial	1,044	1,053	1,063	1,071	1,077
Landscape	2,876	2,526	2,176	1,826	1,476
Hydrants	200	200	200	200	200
Sales to Other Agencies	200	200	200	200	200
Brine Discharge	2,000	2,000	2,000	2,000	2,000
Real & Apparent Losses	2,000	2,000	2,000	2,000	2,000
Reclaimed Water	4,795	5,145	5,495	5,845	6,195
Total Water Use	37,555	37,768	38,017	38,216	38,351

[UWMP, page 7-8]

Single dry year demand without considering the additional demand for the Project is provided in Table 22.

Table 22 – Single Dry Year Demand without Project

Year	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Projected Demand	39,358	39,581	39,842	40,051	40,192

[UWMP, page 7-9]

Multiple dry year demand without considering the additional demand for the Project is provided in Table 23.

Table 23 – Multiple Dry Year Demand without Project

Five Consecutive Dry Years	2025 (AFY)	2030 (AFY)	2035 (AFY)	2040 (AFY)	2045 (AFY)
Year 1	38,382	38,599	38,854	39,057	39,195
Year 2	40,635	40,865	41,135	41,350	41,496
Year 3	42,212	42,452	42,731	42,955	43,107
Year 4	41,987	42,225	42,503	42,726	42,877
Year 5	38,757	38,977	39,234	39,439	39,579

[UWMP, page 7-9]

Section 6 – Determination of Water Supply Sufficiency

Water Code section 10910

- (c) (2) *If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).*
- (3) *If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.*

Table 24 demonstrates supply sufficiency in 2025 assuming Project is constructed within five years.

Table 24 – Supply Sufficiency in 2025

Supply Sufficiency in 2020	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Total Supply	46,222	46,222	46,222	46,222	46,222	46,222
System Demand	37,555	39,358	38,382	40,635	42,212	41,987
Project Demand	105	108	106	110	113	113
Surplus Supply	8,562	6,756	7,734	5,477	3,897	4,122

Table 25 demonstrates supply sufficiency in 2030 assuming Project is constructed within ten years.

Table 25 – Supply Sufficiency in 2030

Supply Sufficiency in 2025	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Total Supply	46,222	46,222	46,222	46,222	46,222	46,222
System Demand	37,768	39,581	38,599	40,865	42,452	42,225
Project Demand	104	108	106	110	112	112
Surplus Supply	8,350	6,533	7,517	5,247	3,658	3,885

Table 26 demonstrates supply sufficiency in 2035 assuming construction is complete.

Table 26 – Supply Sufficiency in 2035

Supply Sufficiency in 2030	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Total Supply	46,222	46,222	46,222	46,222	46,222	46,222
System Demand	38,017	39,842	38,854	41,135	42,731	42,503
Project Demand	104	107	105	109	112	112
Surplus Supply	8,101	6,273	7,263	4,978	3,379	3,607

Table 27 demonstrates supply sufficiency in 2040 assuming construction is complete.

Table 27 – Supply Sufficiency in 2040

Supply Sufficiency in 2035	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Total Supply	46,222	46,222	46,222	46,222	46,222	46,222
System Demand	38,216	40,051	39,057	41,350	42,955	42,726
Project Demand	104	107	105	109	112	112
Surplus Supply	7,902	6,064	7,060	4,763	3,155	3,348

Table 28 demonstrates supply sufficiency in 2045 assuming construction is complete.

Table 28 – Supply Sufficiency in 2045

Supply Sufficiency in 2040	Normal	Single Dry Year	Multiple Dry Year 1	Multiple Dry Year 2	Multiple Dry Year 3	Multiple Dry Year 4
Total Supply	46,222	46,222	46,222	46,222	46,222	46,222
System Demand	38,351	40,192	39,195	41,496	43,107	42,877
Project Demand	103	107	105	109	111	111
Surplus Supply	7,768	5,923	6,922	4,617	3,004	3,234

Under all supply sufficiency tests, there is surplus supply when the demand of the Project is added to projected system demand.

Section 7 – Methods to Overcome Insufficient Water Supply

Water Code section 10910

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

Water Code section 10911

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

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

There is sufficient supply under normal, single dry year and multiple dry year conditions through 2045.

Section 8 – Findings and Recommended Actions

Water Code section 10911

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

(c) The city or county may include in any environmental document an evaluation of any information included in that environmental document provided pursuant to subdivision (b). The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses. If the city or county determines that water supplies will not be sufficient, the city or county shall include that determination in its findings for the project.

Based on the finding that there is sufficient supply under normal year, single dry year and multiple dry year conditions through 2045, the City should approve the Green River Ranch Business Park development with respect to the availability of water resources.

Appendix A

Environmental Documentation

This appendix includes the following:

- Status of EIR
- City of Corona Final Environmental Impact Report (3/29/2011)
- City of Corona EIR Declaration (3/29/2001)

The following information was obtained via the CEQAnet Web Portal (<https://ceqanet.opr.ca.gov/1999091143/2>):

GREEN RIVER RANCH SPECIFIC PLAN AND ANNEXATION

Summary

SCH Number: 1999091143

Lead Agency: City of Corona

Document Title: Green River Ranch Specific Plan and Annexation

Document Type: EIR - Draft EIR

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Document Description

The project is a Specific Plan encompassing 167.8 acres, the majority of which (165.88 acres) to be annexed into the City of Corona. As seen in Figure 1, the project is located on the west side of Corona, south of SR-91 near the Green River Road interchange. As shown in Figure 2, the project proposes to establish Mixed-Use, Commercial-General and Estate Residential land uses. The land uses anticipated upon development of the Specific Plan include 408,600 square feet of manufacturing/light industrial, 82,700 square feet of office, approximately 16,200 square feet of retail, 2 gas stations, a 150-room hotel and 32 homes.

Contact Information

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Location

Cities: Corona

Counties: Riverside

Cross Streets: Dominguez Ranch Road and Green River Road

Total Acres: 167.8

State Highways: SR91, SR71

Railways: Burlington Northern & Santa Fe

Schools: Prado View Elementary School

Waterways: Santa Ana River

Notice of Completion

Review Period Start: 11/9/2020

Review Period End: 12/26/2000

Local Action: General Plan Amendment, Specific Plan, Rezone, Prezone, Annexation

Project Issues

Aesthetics, Air Quality, Cultural Resources, Cumulative Effects, Drainage/Absorption, Flood Plain/Flooding, Geology/Soils, Hydrology/Water Quality, Land Use/Planning, Noise, Population/Housing, Public Services, Sewer Capacity, Transportation, Vegetation, Wetland/Riparian, Wildfire, Wildlife

Reviewing Agencies

California Department of Conservation (DOC), California Department of Parks and Recreation, California Department of Transportation District 8 (DOT), California Department of Transportation, Division of Transportation Planning (DOT), California Highway Patrol, California Native American Heritage Commission (NAHC), California Public Utilities Commission (CPUC), California Regional Water Quality Control Board, Santa Ana Region 8 (RWQCB), California State Lands Commission (SLC), Department of Fish and Wildlife, Region 6, Department of Housing and Community Development, Office of Historic Preservation Resources Agency

Appendix B

Demand Factor Development

Methodology

Billing records for 53 Light Industrial parcels in the vicinity of California Avenue between Rimpau Avenue and Ontario Avenue were analyzed for a 3-year period from 2016 to 2018.

The total existing area was calculated at 107.26 acres and the associated annual water demand was calculated at 181.25 acre-feet per year (AFY). This is equivalent to a factor of 1.69 AFY per acre:

$$\frac{181.25 \text{ AFY}}{107.26 \text{ acres}} \cong 1.69 \text{ AFY per acre}$$

The subject parcels are listed below along with their area in units of acres, average annual water demand in units of AFY and the relationship between water use and area in units of AFY per acre.

Note that in some cases, multiple parcels are served by a single meter.

Assessor's Parcel Number (APN)	Area (acres)	Average Demand (AFY)	Factor (AFY/acre)
107160035	1.98	2.48	1.25
107160033	2.15	2.49	1.16
107160055	1.83	1.45	0.79
107160069	1.18	1.56	1.32
107160054	2.52	3.07	1.22
107160070	0.97	0.89	0.92
107160071	1.03	1.29	1.25
107160072	1.12	0.54	0.48
107160050	1.48	1.41	0.95
107160079	3.11	4.35	1.40
107160019	2.81	5.03	1.79
107160016 107160039	5.24	7.07	1.35
107160043 107160041	5.00	5.05	1.01
107160077	1.48	3.48	2.35
107160047	1.83	3.31	1.81
107170044	0.58	1.29	2.22
107170045	0.48	0.58	1.21
107170006 107170002	20.00	67.8	3.39

Assessor's Parcel Number (APN)	Area (acres)	Average Demand (AFY)	Factor (AFY/acre)
107360007 107360006 107360004 107360003 107360005 107360002 107360008 107360001 107360009	4.33	10.65	2.46
107310023	5.45	22.84	4.19
107180028	2.44	1.34	0.55
107180039	2.44	4.73	1.94
107170048	0.66	1.39	2.10
107170049	0.70	0.71	1.01
107170055	1.29	1.31	1.02
278040027	0.94	2.16	2.29
107180018	2.48	2.44	0.98
107180019	2.48	0.91	0.37
278040039	0.68	0.24	0.36
107180043	4.96	0.18	0.04
107160023	3.36	4.56	1.36
107160057	0.54	0.10	0.18
107160058	0.59	0.08	0.14
107160059	0.68	0.30	0.44
107160064	1.50	0.89	0.59
107160062	0.49	0.12	0.25
107160065	1.29	0.65	0.50
107160060	0.59	0.20	0.34
107160066	1.67	0.71	0.43
107160067	1.99	4.31	2.17
107160056	6.12	2.40	0.39
107160076	4.80	4.88	1.02