Water Supply Assessment

for the Proposed

Coachella Airport Business Park Project

Prepared for:

City of Coachella
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June 2024

Table of Contents

List of Figures

List of Tables

1 Summary and Requirements

The environmental review of the Coachella Airport Business Park (Project) is being prepared in compliance with the California Environmental Quality Act (CEQA) process. The City of Coachella is the Lead Agency for the planning and environmental review of the proposed Project. The City of Coachella has identified the Coachella Water Authority (CWA) as the Public Water System (PWS) that will supply water for the proposed Project and has requested that CWA assist in preparing a Water Supply Assessment (WSA) as part of the environmental review for the Project.

The Project is located in the eastern portion of the Coachella Valley within the City of Coachella, Riverside County. The proposed project entails the development of approximately 47.96 acres of vacant land. This development plan encompasses several key components, including warehouses of varying sizes: 135,340 square feet of warehouses with a cooling tower, warehouses spanning 97,760 square feet with a cooling tower and designated space for cannabis cultivation, and a third small warehouse portion covering 96,000 square feet.

In addition to the warehouses, the project includes 81,000 square feet of commercial/retail buildings, 76,800 square feet of personal vehicle storage facilities, and 128,600 square feet of self-storage buildings. The retail aspect of the development features a 4,000 square foot service station/mini mart and a 4,650 square foot fast-food restaurant. Furthermore, the project includes open space and a substation that will be serviced by IID.

This WSA determined that the total projected water demand for the Project is 151.94 AFY, or 3.17 acre-feet per acre. This WSA demonstrates that sufficient water supplies exist, or will exist based on current water planning assumptions, to meet the projected demands of the Project, in addition to current and future projected water demands within CWA's service area in normal, single-dry, and multiple-dry years over a 20-year projection. This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. Consistent with the provisions of SB 610, neither this WSA nor its approval shall be construed to create a right or entitlement to water service or any specific level of water service, and shall not impose, expand, or limit any duty concerning the obligation of CWA to provide certain service to its existing customers or to any future potential customers.

This WSA does not constitute an agreement to provide water service to the Project, and does not entitle the Project, Project Applicant, or any other person or entity to any right, priority or allocation in any supply, capacity, or facility. To receive water service, the Project will be subject to an agreement with CWA, together with any and all applicable fees, charges, plans and specifications, conditions, and any and all other applicable CWA requirements in place and as amended from time to time. Nor does anything in this WSA prevent or otherwise interfere with CWA's discretionary authority to declare a water shortage emergency in accordance with the Water Code.

1.1 Regulatory Requirements

This WSA provides an assessment of the availability of sufficient water supplies during normal, single-dry, and multiple-dry years over a 20-year projection to meet the projected demands of the Project, in addition to existing and planned future water demands of CWA, as required by Senate Bill (SB) 610 and SB 1262. This WSA also includes identification of existing water supply entitlements, water rights, water service contracts, or agreements relevant to the identified water supply for the Project and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements.

This WSA has been prepared in compliance with the requirements under SB 610 and SB 1262 by MSA Consulting Inc. in consultation with CWA and the City of Coachella. This WSA does not relieve the Project from complying with all applicable state, county, city, and local ordinances or regulations, including the Model Water Efficient Landscape Ordinance (MWELO) and indoor water use performance standards provided in the California Water Code (CWC). This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction, to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. The Project applicant shall notify CWA when construction of the project begins.

1.1.1 Senate Bill 610

On January 1, 2002, Senate Bill 610 (SB 610) was enacted and codified in CWC Section 10910 et seq., requiring the preparation of a Water Supply Assessment (WSA) for certain new development projects. As stated in SB 610, the purpose of a WSA is to determine whether the PWS'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 PWS's existing and planned future uses, including agricultural and manufacturing uses."

CWC Section 10912 defines a "project" as any of the following:

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A proposed hotel or motel, or both, having more than 500 rooms;
- 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 space;
- A mixed-use project that includes one or more of the projects specified in this subdivision; or

- 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 (about 250 acre-feet per year).

The intent of SB 610 is to improve the link between information on water supply availability and certain land-use decisions made by cities and counties.

1.1.2 Senate Bill 1262

On January 1, 2017, Senate Bill 1262 (SB 1262) was enacted and amended CWC Section 10910, requiring that information regarding the Sustainable Groundwater Management Act (SGMA) be included in a WSA if the water supply for a proposed project includes groundwater from a basin that is not adjudicated and was designated medium- or high-priority by the California Department of Water Resources (DWR).

1.2 Water Management Planning Documents

CWA has prepared long-term planning documents to project future was use and manage the water supplies within its service area. These planning documents can be used for compliance with SB 610 and SB 1262 and are discussed in further detail in the following sections.

1.2.1 Urban Water Management Planning Act

The Urban Water Management Planning Act (UWMPA) was established by Assembly Bill 797 (AB 797) on September 21, 1983, and passage of this law recognized that water is a limited resource and that efficient water use and conservation would be actively pursued throughout the State. The UWMPA requires that municipal water suppliers providing either directly or indirectly to more than 3,000 customers or supplying more the 3,000 acre-feet per year (AFY), prepare and adopt an Urban Water Management Plan (UWMP) every five years which defines their current and future water use, source of supply, source reliability, and existing conservation measures.

1.2.1.1 Urban Water Management Plan

CWA is required to prepare a UWMP every five years in response to the requirements of the UWMP Act and Water Conservation Act of 2009 (SBx7-7). CWA prepared and adopted its 2010 and 2015 UWMP to document CWA's projected water demands and plans for delivering water supplies to its water service area during normal, single-dry, and multiple-dry years over a 20-year projection.

The six urban water suppliers in the Coachella Valley (CWA, Coachella Valley Water District (CVWD), Desert Water Agency (DWA), Indio Water Authority (IWA), Mission Springs Water District (MSWD), and Myoma Dunes Mutual Water Company) collaboratively prepared the 2020 Coachella Valley Regional UWMP, including regional and individual agency content and other necessary elements as set forth in DWR's 2020 UWMP Guidebook. The 2020 Coachella Valley Regional UWMP was submitted to DWR on July 1, 2021.

1.2.2 Sustainable Groundwater Management Act

In September 2014, Governor Brown signed three bills into law: Assembly Bill 1739, Senate Bill 1319, and Senate Bill 1168, which became collectively known as the SGMA, creating a framework for sustainable, local groundwater management for the first time in California history. DWR evaluated and prioritized the 515 groundwater basins identified in Bulletin 118, and 94 of these groundwater basins were designated as high- or medium-priority basins, as of December 2019, requiring them to be sustainably managed within 20 years. SGMA required local authorities to form local Groundwater Sustainability Agencies (GSAs) by June 30, 2017, to evaluate conditions in their local groundwater basins and adopt locally-based Groundwater Sustainability Plans (GSPs), or Alternatives to a GSP (Alternative Plans), tailored to their regional economic and environmental needs.

As defined by DWR, the subbasins of the Coachella Valley Groundwater Basin are the Indio, Mission Creek, San Gorgonio Pass, and Desert Hot Springs Subbasins. CWA service area overlies the Indio Subbasin; therefore, the Project is located within the Indio Subbasin. The Indio Subbasin has been designated medium-priority by DWR and is subject to the requirements of SGMA. Basin prioritization is based on a variety of factors such as population, number of wells, and other information determined to be relevant by DWR.

1.2.2.1 Alternative Plan for the Indio Subbasin

Twenty years before the adoption of SGMA, CVWD began the development of the initial water management plan for the Coachella Valley in 1994 after recognizing the need to sustainably manage the Coachella Valley Groundwater Basin. The original planning document is the 2002 Coachella Valley Water Management Plan (CVWMP). The 2002 CVWMP was updated in 2010 and adopted in 2012.

CWA, CVWD, DWA, and IWA, are the Indio Subbasin GSAs designated by DWR for their respective service areas. On December 29, 2016, CWA, CVWD, DWA, and IWA collaboratively submitted the 2010 CVWMP Update as an Alternative Plan for the Indio Subbasin, with an associated Bridge Document and supporting documents, to DWR for review and evaluation. On July 17, 2019, DWR determined that the Alternative Plan for the Indio Subbasin satisfies the objectives of SGMA and notified the Indio Subbasin GSAs that the Alternative Plan was approved, and that they would be required to submit an assessment and update of the Alternative Plan pursuant to the SGMA by January 1, 2022, and every five years thereafter. The 2022 Alternative Plan Update for the Indio Subbasin was submitted to DWR on December 29, 2021.

On February 1, 2018, DWR notified all GSAs who submitted Alternative Plans that they would be required to submit annual reports pursuant to SGMA by April 1, 2018, and every year thereafter. CWA, CVWD, DWA, and IWA have collaboratively prepared and submitted the Indio Subbasin Annual Reports for Water Years 2016-2017 through 2021-2022.

1.2.3 Groundwater Replenishment

Colorado River water has been a major source of supply for the Coachella Valley since 1949 with the completion of the Coachella Canal. The Coachella Canal (Canal) is a branch of the All-American Canal that brings Colorado River water into the Imperial and Coachella Valleys. The Canal originates at Drop 1 on the All-American Canal and extends approximately 122 miles, terminating in CVWD's Lake Cahuilla. This water is used for agricultural, golf courses, and landscape irrigation purposes, as well as groundwater replenishment. The Colorado River is managed and operated in accordance with the Law of the River, the collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use of Colorado River water within the seven Colorado River Basin states.

State Water Code (SWC) 31630-31639 provides CVWD with the authority to levy and collect water Replenishment Assessment Charges (RACs) to implement groundwater replenishment programs (GRPs) within its jurisdictional boundary. Groundwater replenishment is necessary to mitigate overdraft of the groundwater basin and associated undesirable results. The jurisdictional areas that benefit from the GRPs, and where CVWD levies replenishment assessments on groundwater production, are termed Areas of Benefit (AOBs). There are three AOBs within CVWD's boundary: the Mission Creek Subbasin AOB, the West Whitewater River Subbasin AOB, and the East Whitewater River Subbasin AOB. The GRP for the West Whitewater River Subbasin AOB was formed in 1976, the GRP for the Mission Creek Subbasin AOB was formed in 2003, and the GRP for the East Whitewater River Subbasin AOB was formed in 2004. To recover the cost of the GRP, a RAC is applied to all non-exempt groundwater production. These RACs are calculated and managed separately by each agency for each of the AOBs. The Project is located within the East Whitewater River Subbasin AOB.

1.2.3.1 Annual Engineer's Reports

CVWD is required to prepare and present to its Board of Directors annually an Engineer's Report on Water Supply and Replenishment Assessment on the conditions of the groundwater supplies and recommend RACs to be levied upon groundwater production greater than 25 AFY within each AOB in accordance with SWC 31630-31639. The Engineer's Report must include the following information: a summary of the conditions of groundwater supplies; the need for replenishment; a description of the replenishment programs, including the source and amount of replenishment waters, the costs associated with the GRP, the areas directly and indirectly benefited by the GRP, and the amount of groundwater produced in each area during the prior year; and a recommendation for the RAC to be levied on each AOB. The 2023-2024 Engineer's Report on Water Supply and Replenishment Assessment was prepared and presented to CVWD's Board of Directors on April 25, 2023.

The significance of CVWD's Annual Engineers Report extends to CWA, as CWA is obligated to pay RACs to guarantee water availability to its service population. These RACs help ensure that the Coachella Valley Groundwater Basin is properly managed.

2 Public Water System

The City of Coachella is the Lead Agency for the planning and environmental review of the proposed Coachella Airport Business Park (Project). The City of Coachella has identified the Coachella Water Authority (CWA) as the Public Water System (PWS) that will supply water for the proposed Project and has requested that CWA assist in preparing a Water Supply Assessment (WSA) as part of the environmental review for the Project.

2.1 Coachella Water Authority

The City of Coachella provides domestic water delivery, wastewater collection and reclamation, and local drainage control. In addition, the City manages the Coachella Sanitary District that operates a 4.5 MGD secondary treatment wastewater facility.

The Coachella Water Authority (CWA) was established in 1957 and is administered and managed by the Utilities General Manager under direct supervision of the City Manager. CWA's existing water system consists of different pressure zones, groundwater wells, storage reservoirs, booster pumping stations, and distribution facilities. The current water system is divided into two pressure zones, the Low Zone and the 150 Zone. The Low Zone Area is generally south of 48th Avenue, bounded by Van Buren on the west, the Coachella Valley Storm Channel on the east, and 54th Avenue on the south. The Low Zone provides water service to the majority of the City and as the City continues to grow, the Low Zone will extend further east. The 150 Zone service area is generally north of 48th Avenue and supplies primarily commercial and light industrial users along the Interstate 10 freeway corridor.

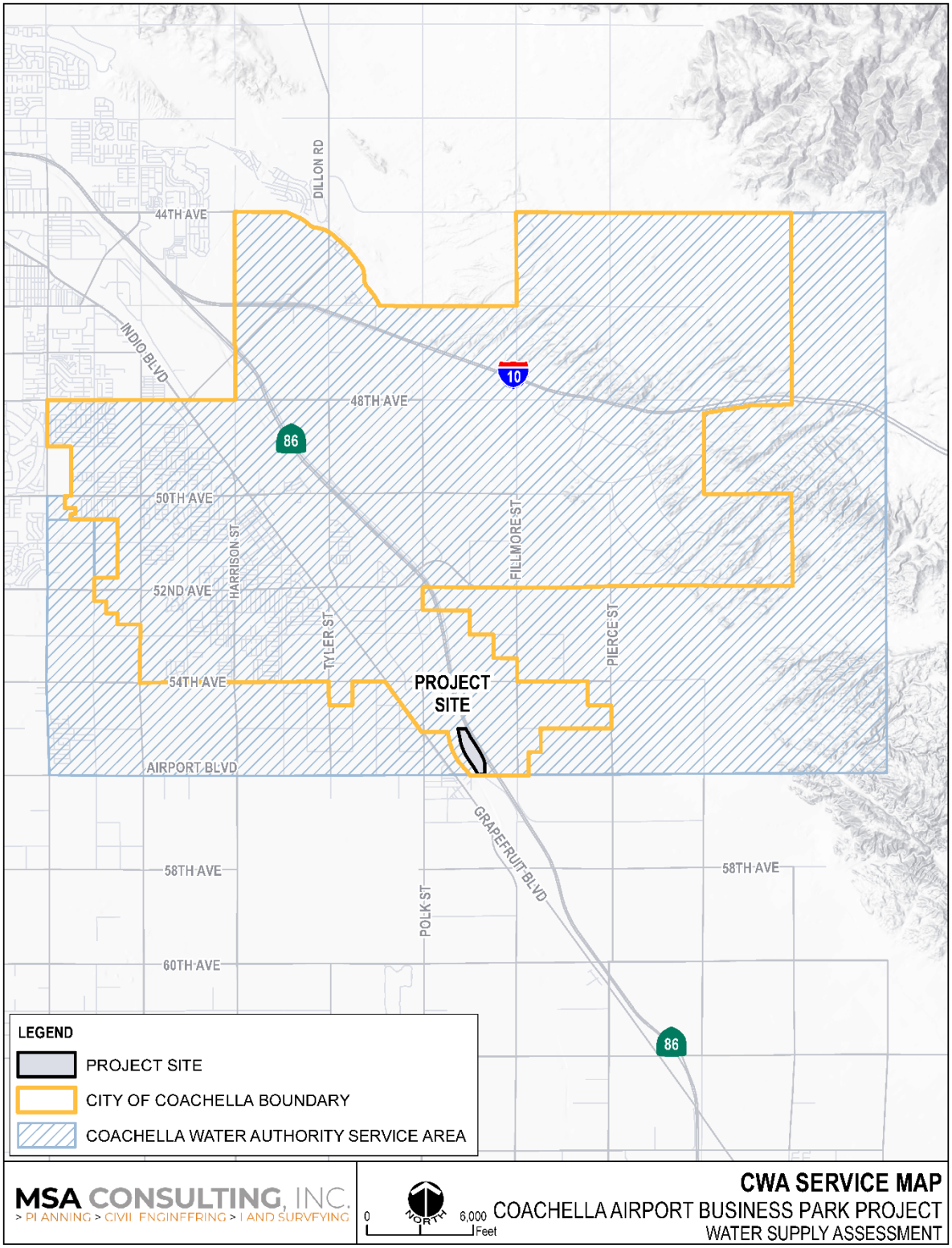
There are currently six wells within the City's distribution system. The total pumping capacity of active wells is approximately 11,400 gallons per minute (gpm) or 16.5 million gallons per day (MGD). There are three storage reservoirs within the City, the 1.5-million-gallon (MG) Dillion Road Reservoir, the 3.6 MG Mecca Reservoir, and the 5.4 MG Well 18 Reservoir. CWA has a total reservoir storage capacity of approximately 10.5 MG; of which approximately 1.5 MG lies within the 150 Zone.

CWA operates two booster pumping stations, the Mecca Reservoir booster pump station (Well 12 Booster) and the Well 18 Reservoir booster pump station (Well 18 Booster). The Well 12 Booster supplies the Low Zone and takes suction from the Mecca Reservoir, and the Well 18 Booster supplies both the 150 Zone and Low Zone and takes suction from the Well 18 Reservoir. CWA's distribution system network consists of approximately 120 miles of pipeline. It is estimated that a majority of pipes in the City's water distribution system network were installed between the year 1940 and year 1990. The older pipes reside in the southerly section of the lower zone, and the newer pipes are in the northerly section.

CWA's current water supply source is groundwater from the Indio Subbasin produced from CWA owned and operated wells. While CWA is responsible for the water supply for its residents, the City pays RACs to CVWD to ensure necessary groundwater management and replenishment is achieved for the East White Water River Subbasin AOB.

Agricultural areas are not served by CWA's water system and rely on Coachella Canal water and privately owned and operated wells. As undeveloped and agricultural lands are developed into residential or other land uses, they will be served by CWA and become part of CWA's service area. For the purpose of developing baselines and targets, CWA delineated the existing water service area based on the existing distribution system as shown in **Figure 2-1**.

Figure 2-1: Coachella Water Authority Service Map



2.2 Coachella Valley Hydrology

The bulk of natural groundwater replenishment comes from runoff from the adjacent mountains. The climate in the Coachella Valley is characterized by low humidity, high summer temperatures, and mild dry winters. Average annual precipitation varies from 3 to 6 inches of rain on the Coachella Valley floor to more than 30 inches in the surrounding mountains. Most of the precipitation occurs between December and February, except for summer thundershowers. Prevailing winds in the area are usually gentle, but occasionally increase to velocities as high as 30 miles per hour or more. Mid-summer temperatures commonly exceed 100 degrees Fahrenheit (°F), frequently reach 110 °F, and periodically reach or exceed 120 °F, and the average winter temperature is approximately 60 °F as shown in **Table 2-1** and **Table 2-2**.

Table 2-1: Monthly Average Climate Data for Palm Springs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max (°F)[1]	71	73	80	86	94	104	108	107	102	90	78	69	89
Min (°F)[1]	47	49	54	59	65	73	80	79	74	64	53	46	62
Rain (in)[1]	0.95	0.92	0.36	0.10	0.02	0.00	0.25	0.14	0.20	0.20	0.26	0.70	3.80
ETo (in)[2]	2.5	3.4	5.6	7.1	8.3	8.7	8.1	7.5	6.2	4.7	2.9	2.2	67.2

Source: 2020 Coachella Valley Regional Urban Water Management Plan

[1] National Weather Service Forecast, Station Palm Springs Airport, 1998-2020

[2] CIMIS Station 208 – La Quinta II, 2007-2020

Table 2-2: Monthly Average Climate Data for Coachella

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Max (°F)	71	74	80	85	91	101	102	103	98	88	78	67	87
Min (°F)	43	45	52	58	64	71	78	78	71	60	50	42	59
Rain (in)	0.6	0.1	1.0	0.4	0.1	0.2	0.1	0.1	0.1	0.3	0.3	0.7	3.9
ETo (in)	2.5	3.4	5.6	7.1	8.3	8.7	8.1	7.5	6.2	4.7	2.9	2.2	67.2

Source: 2020 Coachella Valley Regional Urban Water Management Plan

Data from California Irrigation Management Information System (CIMIS) Station 208, La Quinta II. Data from February 2007 through December 2020.

3 Public Water System – Existing Supply and Demand

Currently, all CWA's urban potable water uses are supplied using groundwater from the East Whitewater River Subbasin, which is continually replenished by CVWD. As defined by the SWC, CWA is a producer who files a sworn statement with the district setting forth the total quantity of water production in acre-feet which is subject to the Replenishment Assessment Charge (RAC). The RAC partially funds CVWD's groundwater replenishment program. There are three separate RACs based on geography because of the varying costs and benefits of the replenishment program for each geography. CWA pays RACs to ensure that the East Whitewater River Subbasin is replenished. To replenish the East Whitewater River Subbasin, CVWD receives imported water from the Colorado River.

3.1 Groundwater

Groundwater is the principal source of potable supply in the Coachella Valley and CWA obtains water from the East Whitewater River Subbasin of the Coachella Valley Groundwater Basin. CVWD has statutory authority to replenish local groundwater supplies and collect RACs necessary to support a groundwater replenishment program as provided in the County Water District Law (California Water Code section 30000, et seq.) and as a GSA under the SGMA. CWA pays the RAC to ensure the East Whitewater River Subbasin Area of Benefit is properly managed.

3.1.1 Coachella Valley Groundwater Basin

The Coachella Valley Groundwater Basin is bounded on the north and east by the San Bernardino and Little San Bernardino Mountains, on the south and west by the Santa Rosa and San Jacinto Mountains, and on the south by the Salton Sea. At the west end of the San Gorgonio Pass, between Beaumont and Banning, the basin boundary is defined by a surface drainage divide separating the Coachella Valley Groundwater Basin from the Beaumont Groundwater Basin of the Upper Santa Ana Drainage Area.

The southern boundary is formed primarily by the watershed of the Mecca Hills and by the northwest shoreline of the Salton Sea running between the Santa Rosa Mountains and Mortmar. Between the Salton Sea and Travertine Rock, at the base of the Santa Rosa Mountains, the southern boundary crosses the Riverside County Line into Imperial and San Diego Counties.

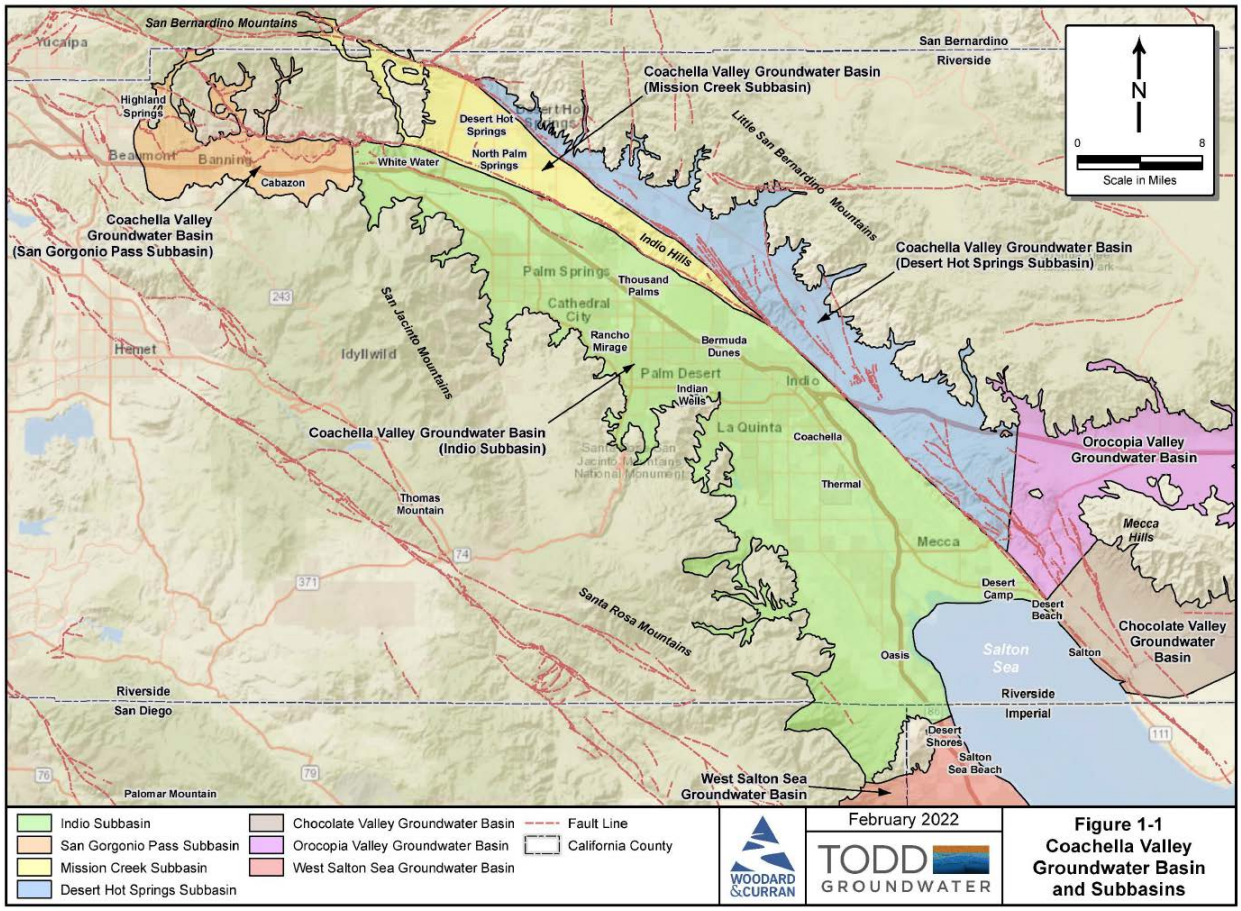
Although there is interflow of groundwater throughout the Coachella Valley Groundwater Basin, fault barriers, constrictions in the basin profile, and areas of low permeability limit and control movement of groundwater. Based on these factors, the Coachella Valley Groundwater Basin has been divided into subbasins and subareas as described by DWR in 1964 and 2003, and by the United States Geological Survey (USGS) in 1974.

3.1.1.1 Coachella Valley Groundwater Basin – Subbasins

As shown on **Figure 3-1,** the subbasins of the Coachella Valley Groundwater Basin are the Indio, Mission Creek, San Gorgonio Pass, and Desert Hot Springs Subbasins. The subbasins are defined without regard to water quantity or quality. They delineate areas underlain by formations which readily yield stored groundwater through water wells and offer natural reservoirs for the regulation of water supplies.

The boundaries between subbasins within the Coachella Valley Groundwater Basin are generally defined by faults that impede the lateral movement of groundwater. Minor subareas have also been delineated based on one or more of the following geologic or hydrologic characteristics: types of water-bearing formations, water quality, areas of confined groundwater, forebay areas, groundwater divides, and surface drainage divides.

Figure 3-1: Coachella Valley Groundwater Basin and Subbasins



Source: Indio Subbasin Annual Report for Water Year 2020-2021

The following is a list of the subbasins in the Coachella Valley Groundwater Basin as designated by DWR in Bulletin 118:

- Indio Subbasin (Subbasin 7-21.01)
- Mission Creek Subbasin (Subbasin 7-21.02)
- San Gorgonio Pass Subbasin (Subbasin 7-21.03)
- Desert Hot Springs Subbasin (Subbasin 7-21.04)

DWR designated the Indio, Mission Creek, and San Gorgonio Pass Subbasins as medium-priority, and the Desert Hot Springs Subbasin as very low priority. None of the subbasins are adjudicated or in a state of overdraft.

In 1964, DWR estimated that the subbasins in the Coachella Valley Groundwater Basin contained approximately 39,200,000 acre-feet (AF) of water in the first 1,000 feet below the groundwater surface. The capacities of the subbasins are shown in **Table 3-1**.

Table 3-1: Groundwater Storage in the Coachella Valley Groundwater Basin

Subbasin/Subarea	Storage (AF) [1]
Indio Subbasin	
Palm Springs Subarea	4,600,000
Thousand Palms Subarea	1,800,000
Oasis Subarea	3,000,000
Garnet Hill Subarea	1,000,000
Thermal Subarea	19,400,000
Indio Subbasin Subtotal	**29,800,000**
Mission Creek Subbasin	2,600,000
San Gorgonio Subbasin	2,700,000
Desert Hot Springs Subbasin	4,100,000
Total	**39,200,000**

Source: DWR Bulletin 108 (1964)

[1] First 1,000 feet below ground surface. (DWR, 1964)

3.1.2 Groundwater Demand

Groundwater is the principal source of potable supply in the Coachella Valley and CWA obtains groundwater from the Indio Subbasin of the Coachella Valley Groundwater Basin, which is continually replenished by CVWD. CWA's groundwater demand in the Coachella Valley Groundwater Basin for 2016 through 2020 is shown in **Table 3-2**.

Table 3-2: CWA Groundwater Demand in the Coachella Valley Groundwater Basin

Groundwater Production (AF)	2016	2017	2018	2019	2020
Indio Subbasin	6,236	6,818	7,136	6,802	7,216

Source: 2020 Coachella Valley Regional Urban Water Management Plan

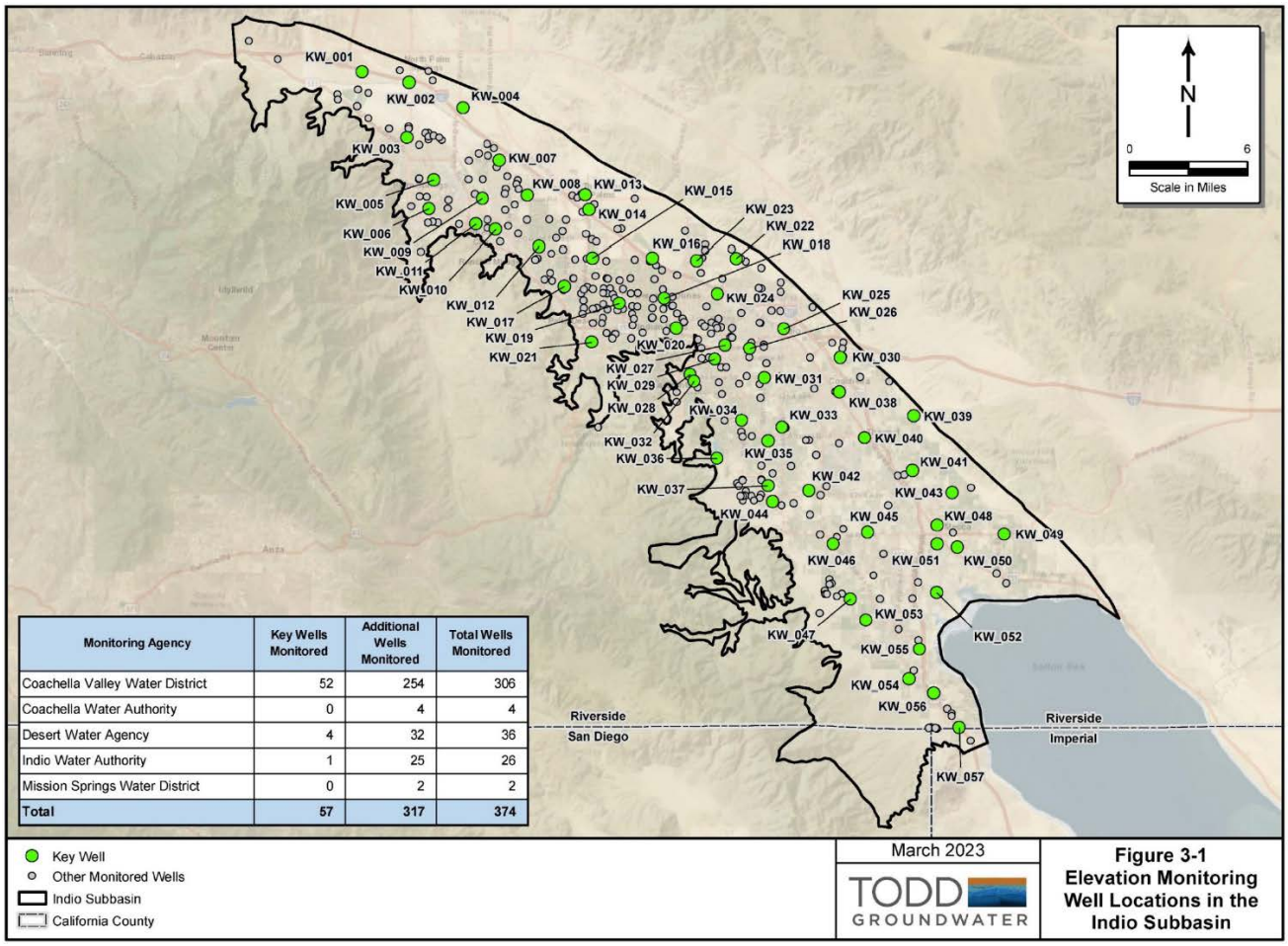
3.1.3 Groundwater Sustainability

Long-term sustainability is typically assessed based on changes in groundwater storage over a period on the order of ten to twenty years that includes wet and dry periods.

3.1.3.1 Indio Subbasin

The 2022 Indio Subbasin Alternative Plan Update identified 57 Key Wells across the subbasin to represent local groundwater levels, shown in **Figure 3-2**. The plan set metrics to demonstrate sustainability, including a Minimum Threshold (MT) at each Key Well. MTs are numeric values used to define undesirable results under SGMA. In WY 2021-2022, water levels in all 57 Key Wells remained above their respective MTs. This confirms that the significant undesirable results of chronic lowering of groundwater levels, depletion of groundwater storage, and potential subsidence are not occurring in the Indio Subbasin.

Figure 3-2: Water Level Monitoring Wells in the Indio Subbasin



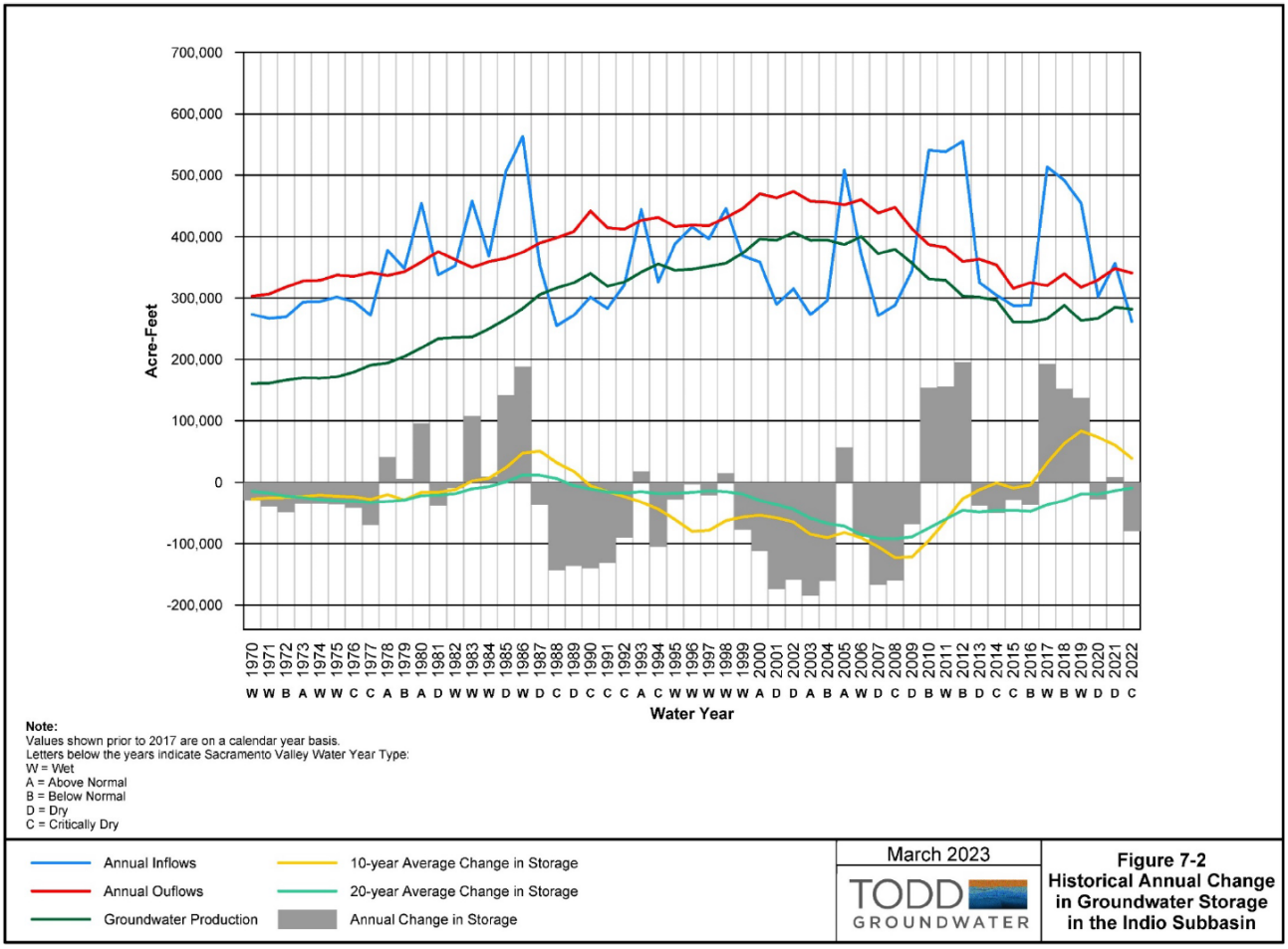
Monitoring Agency	Key Wells Monitored	Additional Wells Monitored	Total Wells Monitored
Coachella Valley Water District	52	254	306
Coachella Water Authority	0	4	4
Desert Water Agency	4	32	36
Indio Water Authority	1	25	26
Mission Springs Water District	0	2	2
Total	**57**	**317**	**374**

Source: 2022 Alternative Plan Update for the Indio Subbasin

Figure 3-3 shows the historical annual change in groundwater storage from 1970 through Water Year (WY) 2020-2021 in the Indio Subbasin. The figure also shows annual inflows, outflows, groundwater production, and 10-year and 20-year running-average change in groundwater storage. During periods of high artificial recharge, the change in storage tends to be positive. In dry years or periods of high groundwater pumping, the change in storage can be negative.

As shown in **Figure 3-3**, annual inflows to the Indio Subbasin are highly variable with years of high inflows corresponding to wet years when State Water Project (SWP) delivery volumes were greater. Higher inflows in the mid-1980s occurred when the Metropolitan Water District of Southern California (MWD) commenced large-scale advanced water deliveries to the Indio Subbasin. After an extended period of decline, both the 10-year and 20-year running-average change in storage have shown positive trends since 2009, and the 10-year running-average has been positive since 2017. Thomas E. Levy Groundwater Replenishment Facility (GRF) that services CWA does not receive SWP water; however, it is important to understand what deliverables occur for the whole Indio Subbasin.

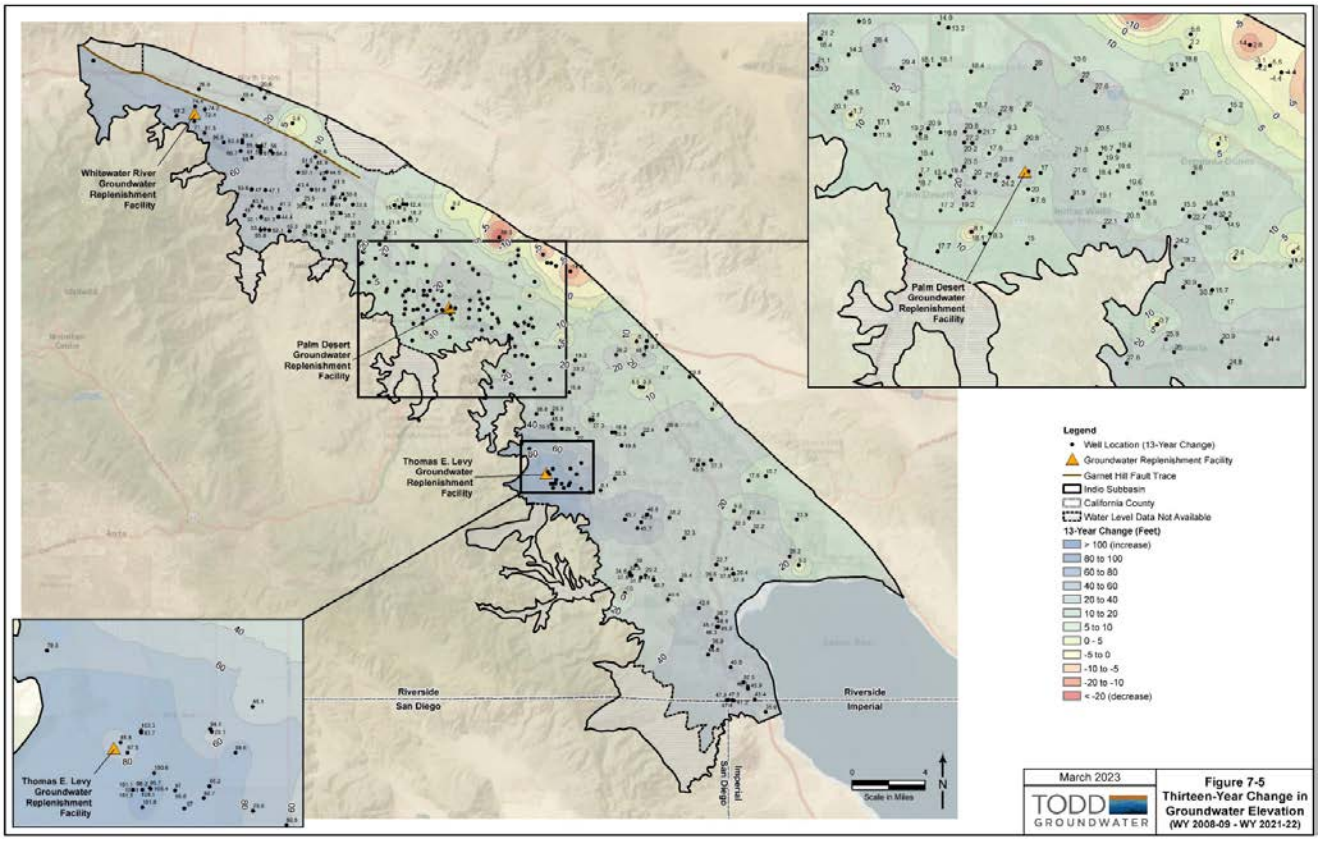
Figure 3-3: Historical Annual Change in Groundwater Storage in the Indio Subbasin



Source: Indio Subbasin Annual Report for Water Year 2021-2022

As shown in **Figure 3-4**, groundwater levels have increased significantly in the Indio Subbasin from WY 2008-2009 to WY 2021-2022. The Indio Subbasin Annual Report uses 2009 water levels as a metric of sustainability because historical low groundwater levels occurred in the years around 2009 throughout most of the Indio Subbasin. The Indio Subbasin shows a long-term positive trend in sustainability resulting from implementation of the Indio Subbasin Alternative Plan.

Figure 3-4: Change in Groundwater Elevation from Water Year 2008-2009 through Water Year 2021-2022 in the Indio Subbasin



Source: Indio Subbasin Annual Report for Water Year 2021-2022

CWA, CVWD, DWA, and IWA represent the GSA responsible for sustainably managing the Indio Subbasin in compliance with the SGMA. The GSAs have continued efforts to advance the project management actions (PMAs) to maintain the Indio Subbasin in sustainable conditions, able to meet Plan Area water demands, and groundwater levels and quality that avoid undesirable results. With continued implementation of these PMAs, the GSAs are anticipated to meet their water management goals and comply effectively with SGMA. PMAs regarding CWA and its service population discussed in the Indio Subbasin 2021-2022 Annual Report include outreach and costumer programs, costumer rebates, grant funding, and developing a Water Shortage Contingency Plan (WSCP). Water shortage contingency planning is further discussed below in **Section 3.7 - Water Shortage Contingency Planning.**

3.2 Imported Water

CWA's current water supply source is groundwater from the Indio Subbasin produced from CWA owned and operated wells. There are currently six wells within the City's distribution system. The East Whitewater River Subbasin is regionally managed by CWA, CVWD, and IWA. CVWD has statutory authority to replenish local groundwater supplies and collect assessments necessary to support a groundwater replenishment program as provided in the Country Water District Law.

CWA pays RACs according to groundwater use to ensure that the East Whitewater River Subbasin is replenished.

CVWD has two sources of imported water available: Colorado River water delivered via the Coachella Canal and SWP water exchanged for Colorado River water delivered through the Colorado River Aqueduct. These imported water sources are used to recharge the groundwater basin and as an alternative to meet non-potable demands from irrigation of agriculture, golf, and urban uses that would have otherwise been met by pumping groundwater. The source of replenishment water for Thomas E. Levy is Colorado River water via the Coachella Canal and does not include SWP water. CWA receives benefits from the Thomas E. Levy GRF; therefore, CWA pays RACs to ensure the eastern portion (East Whitewater River Subbasin) of the Indio Subbasin receives enough water from the Colorado River to replenish water needed to service CWA customers.

3.2.1 Colorado River Water

Colorado River water has been a significant water supply source for the Indio Subbasin since the Coachella Canal was completed in 1949. CVWD is the only agency in the Indio Subbasin that receives Colorado River water allocations. The Colorado River is managed and operated in accordance with the Law of the River, a collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use Colorado River water within the seven Colorado River Basin states. The 1922 Colorado River Compact apportioned the waters of the Colorado River Basin between the Upper Colorado River Basin (i.e., Colorado, Wyoming, Utah, and New Mexico) and the Lower Basin (i.e., Nevada, Arizona, and California). The 1922 Colorado River Compact allocates 15 million AFY of Colorado River water as follows: 7.5 million AFY to the Upper Basin and 7.5 million AFY to the Lower Basin, plus up to 1 million AFY of surplus supplies. The Lower Basin's water was further apportioned among the three Lower Basin states by the 1928 Boulder Canyon Project Act and the 1931 Boulder Canyon Project Agreement, typically called the 1931 Seven Party Agreement, which allocates California's apportionment of Colorado River water among Palo Verde Irrigation District, Imperial Irrigation District (IID), CVWD, Metropolitan Water District of Southern California (MWD), City of Los Angeles, City of San Diego, and County of San Diego. The 1964 U.S. Supreme Court decree in Arizona v. California established Arizona's basic annual apportionment at 2.8 million AFY, California's at 4.4 million AFY, and Nevada's at 0.3 million AFY. Mexico is entitled to 1.5 million AFY of the Colorado River under the 1944 United States-Mexico Treaty for Utilization of Waters of the Colorado and Tijuana Rivers and of the Rio Grande. However, this treaty did not specify a required quality for water entering Mexico. In 1973, the United States and Mexico signed Minute No. 242 of the International Boundary and Water Commission requiring certain water quality standards for water entering Mexico. California's Colorado River supply is protected by the 1968 Colorado River Basin Project Act, which provides that in years of insufficient supply on the main stem of the Colorado River, supplies to the Central Arizona Project shall be reduced to zero before

California will be reduced below 4.4 million AF in any year. This assures full supplies to the Coachella Valley, except in periods of extreme drought.

The Coachella Canal is a branch of the All-American Canal that brings Colorado River water into the Imperial and Coachella Valleys. Under the 1931 Seven Party Agreement, CVWD receives 330,000 AFY of Priority 3A Colorado River water diverted from the All-American Canal at the Imperial Dam. The Coachella Canal originates at Drop 1 on the All-American Canal and extends approximately 123 miles, terminating in CVWD's Lake Cahuilla. The service area for Colorado River water delivery under CVWD's contract with the U.S. Bureau of Reclamation (USBR) is defined as Improvement District No. 1 (ID-1), which encompasses 136,400 acres covering most of the East Valley and a portion of the West Valley north of Interstate 10. Under the 1931 Seven Party Agreement, CVWD has water rights to Colorado River water as part of the first 3.85 million AFY allocated to California. CVWD is in the third priority position along with IID.

In 2003, CVWD, IID, and MWD successfully negotiated the 2003 Quantification Settlement Agreement (2003 QSA), which quantifies Colorado River allocations through 2077 and supports the transfer of water between agencies. Under the 2003 QSA, CVWD has a base entitlement of 330,000 AFY. CVWD negotiated water transfer agreements with MWD and IID that increased CVWD supplies by an additional 123,000 AFY. CVWD's net QSA supply will increase to 424,000 AFY by 2026 and remain at that level until 2047, decreasing to 421,000 AFY until 2077, when the agreement terminates. As of 2021, CVWD's available Colorado River water diversions at Imperial Dam under the QSA were 399,000 AFY. This includes the base entitlement of 330,000 AFY, the MWD/IID Transfer of 20,000 AFY, IID/CVWD First Transfer of 50,000 AFY, and IID/CVWD Second Transfer of 28,000 AFY. CVWD's QSA diversions also deducts the -26,000 AFY transferred to San Diego County Water Authority (SDCWA) as part of the Coachella Canal Lining Project and the -3,000 AFY transfer to Indian Present Perfected Rights. Additionally, under the 2003 QSA, MWD transferred 35,000 AFY of its State Water Project (SWP) Table A Amount to CVWD. This SWP water is exchanged for Colorado River water and can be delivered at Imperial Dam for delivery via the Coachella Canal to the eastern portion of the Indio Subbasin or at Lake Havasu for delivery via the Colorado River Aqueduct to the western portion of the Indio Subbasin at the Whitewater River Groundwater Replenishment Facility (WWR-GRF). The 2019 Second Amendment guaranteed delivery of the 35,000 AFY from 2019 to 2026, for a total of 280,000 AFY of water to the WWR-GRF during that timeframe. MWD can deliver the water through CVWD's Whitewater Service Connections (for recharge at WWR-GRF) or via the Advance Delivery account.

The MWD/IID Transfer originated in a 1989 agreement with MWD to receive 20,000 AF of its Colorado River supply. The 2019 Amended and Restated Agreement for Exchange and Advance Delivery of Water defined the exchange and delivery terms between MWD, CVWD, and DWA. The 2019 Second Amendment to Delivery and Exchange Agreement reduced CVWD's annual delivery of the MWD/IID Transfer to 15,000 AFY, for a total of 105,000 AF, if taken at the Whitewater Service Connections (for recharge at WWR-GRF) between 2020 and 2026. For those seven years, MWD keeps the remaining 5,000 AFY, after which CVWD's allocation increases back

up to 20,000 AFY. CVWD's total allocations under the QSA, including MWD's transfer of 35,000 AFY and the MWD/IID Transfer, will increase from 424,000 AFY in 2020 to 459,000 AFY by 2026 and remain at that level for the remainder of the 75-year term of the QSA. **Table 3-3** lists total Colorado River entitlements under existing agreements.

Table 3-3: CVWD Colorado River Entitlements (AFY)

Diversion	2020	2025	2030	2035	2040	2045
Base Entitlement	330,000	330,000	330,000	330,000	330,000	330,000
1988 MWD/IID Approval Agreement	20,000	20,000	20,000	20,000	20,000	20,000
IID/CVWD First Transfer	50,000	50,000	50,000	50,000	50,000	50,000
IID/CVWD Second Transfer[1]	23,000	48,000	53,000	53,000	53,000	53,000
Coachella Canal Lining	-26,000	-26,000	-26,000	-26,000	-26,000	-26,000
Indian Present Perfected Rights Transfer	-3,000	-3,000	-3,000	-3,000	-3,000	-3,000
QSA Diversions	**394,000**	**419,000**	**424,000**	**424,000**	**424,000**	**424,000**
MWD SWP Transfer[2]	35,000	35,000	35,000	35,000	35,000	35,000
Total Diversions	**429,000**	**454,000**	**459,000**	**459,000**	**459,000**	**459,000**
Assumed Conveyance Losses (5%)	-21,200	-22,700	-22,950	-22,950	-22,950	-22,950
MWD/IID Approval Agreement Transfer[3]	-5,000	-5,000	0	0	0	0
Total Available Deliveries	**402,800**	**426,300**	**436,050**	**436,050**	**436,050**	**436,050**

Source: 2022 Alternative Plan Update for the Indio Subbasin

[1] The Second IID/CVWD Transfer began in 2018 with 13,000 AF of water. This amount increases annually by 5,000 AFY for a total of 53,000 AFY in 2026.

[2] The 35,000 AFY MWD/CVWD SWP Transfer may be delivered at either Imperial Dam or Whitewater River and is not subject to SWP or Colorado River reliability.

[3] Accounts for -5,000 AFY reduction in MWD/IID Approval Agreement deliveries from 2020-2026 per the 2019 Amendments with MWD.

The Colorado River deliveries to CVWD at the Imperial Dam/Coachella Canal from 2017 through 2021 are shown in **Table 3-4.**

Table 3-4: Colorado River Deliveries to CVWD at the Imperial Dam/Coachella Canal

Diversions (AF)	2017	2018	2019	2020	2021
Imperial Dam/Coachella Canal	335,321	338,035	343,971	350,618	357,543

Source: U.S. Bureau of Reclamation, Lower Colorado Region, Colorado River Accounting and Water Use Reports for Arizona, California, and Nevada. 2021 data is provisional.

CVWD's recharge volumes of Colorado River water from 2017 through 2021 are shown in **Table 3-5**. The source of replenishment water for the Palm Desert GRF and Thomas E. Levy GRF is Colorado River water via the Coachella Canal. CWA receives benefits from the Thomas E. Levy GRF.

Table 3-5: CVWD Groundwater Recharge of Colorado River Water

Groundwater Recharge (AF)	2017	2018	2019	2020	2021
Thomas E. Levy GRF	34,614	33,348	36,143	37,536	37,971
Palm Desert GRF	0	0	7,757	9,700	10,633
Total	**34,614**	**33,348**	**43,900**	**47,236**	**48,604**

Source: 2022-2023 CVWD Annual Engineer's Reports on Water Supply and Replenishment Assessment

3.3 Surface Water

CWA does not currently use, nor does it have plans to use, any local surface water for its urban potable drinking water supply. Local runoff is collected and utilized for the purpose of recharging groundwater.

3.3.1 River/Stream Diversion

Precipitation that falls in the San Jacinto, Santa Rosa, and Little San Bernardino Mountains is the primary source of natural recharge in the Indio Subbasin with only minor recharge from precipitation in the Little San Bernardino Mountains. Mountain-front recharge includes subsurface inflow from canyons and surface runoff from minor tributaries along the mountain fronts. The Whitewater River is the major stream channel contributing recharge with additional infiltration along other channels such as Snow and Falls Creeks in the upper valley and several smaller streams in the lower portion of the valley that only flow during wet years. The annual volume of natural recharge varies significantly as the annual volume of precipitation varies widely. The 50-year hydrologic period from 1970 to 2019 had an annual average watershed runoff of 52,506 AFY, with approximately 43,300 AFY in natural infiltration. Runoff during the 25-year period from 1995 to 2019 was below average, with 39,196 AFY in watershed runoff and 29,200 AFY in natural infiltration. During normal and wet years, mountain front recharge from these streams and smaller watersheds percolate into the Subbasin as additional subsurface flow.

3.3.2 Stormwater Capture

The Coachella Valley drainage area is approximately 65 percent mountainous and 35 percent typical desert valley with alluvial fan topography buffering the valley floor from the steep mountain slopes. The mean annual precipitation ranges from 30 inches or more in the San Bernardino Mountains to less than 3 inches at the Salton Sea. Three types of storms produce precipitation in the drainage area: general winter storms, general thunderstorms, and local thunderstorms. Longer duration, lower intensity rainfall events tend to have higher recharge rates, but runoff from flash flooding can result from all three types of storms. Otherwise, there is little to no flow in most of the streams in the drainage area.

Large-scale stormwater capture is not expected to yield sufficient water to be worth the investment as a single purpose project. Small-scale stormwater retention systems located in areas of suitable geology to allow percolation could capture small intensity storms as well as street runoff. The potential yield of these systems is not known at this time, but stormwater capture should be considered in conjunction with projects that construct stormwater and flood control facilities.

3.4 Wastewater and Recycled Water

Wastewater that has been highly treated and disinfected can be reused for landscape irrigation and other purposes. Recycled wastewater has historically been used for irrigation of golf courses

and municipal landscaping in the Coachella Valley since as early as the 1960s. As growth occurs in the eastern Coachella Valley, the supply of recycled water is expected to increase, creating an additional opportunity to maximize local water supply.

The City of Coachella manages the Coachella Sanitary District that operates a 4.5 MGD secondary treatment wastewater facility. In addition, the City also plans to develop a recycled water system in the future and is currently participating in a recycled water feasibility study spearheaded by the Coachella Valley Regional Water Management Group (CVRWMG) as part of the Coachella Valley Integrated Regional Water Management (IRWM) Plan. The Coachella Water Reclamation Facility has a 4.5 MGD capacity and current average daily discharge of 2.7 MGD. The plant is a full secondary treatment facility with oxidation ditches for denitrification. Waste activated sludge is sent to drying beds for dewatering and then hauled away to landfill for alternate daily cover material.

In addition to the wastewater percolation that occurs at wastewater treatment ponds, some inflow occurs from septic tank/leach field systems that are used to treat and percolate wastewater. These are grouped with return flows because they are individually small and distributed across rural portions of the Indio Subbasin and a few urban areas without access to sewer systems. There are also some septic systems in areas with access to sewer services that have not connected.

3.5 Conservation

Water conservation, and the reduced groundwater production associated with water conservation, benefits the groundwater basin and is an important element of the Alternative Plans and the 2020 Regional Coachella Valley UWMP.

The City of Coachella has a prohibition for wasting water in Municipal Code Section 13.03.044 which states it is unlawful for any person to willfully or neglectfully waste water in any manner whatsoever. Additionally, the City has mandatory prohibitions on water wasting that they enforce during a water shortage. These prohibitions include voluntary and mandatory provisions, audits, and fines that can be imposed. CWA also implements comprehensive water conservation practices such as tiered water rates, turf rebate programs, outreach, and education.

The City's Utilities General Manager serves the City as its water conservation coordinator along with the staff Environmental/Regulatory Program Manager. They work closely with agencies in the region, particularly through the CVRWMG and CV Watercounts, to implement and provide successful execution of water conservation programs in the City. The City continues to investigate Federal, State, and local funding to develop new programs throughout its service area.

3.6 Landscape Ordinance

The City of Coachella abides by the Model Water Efficient Landscape Ordinance (MWELO) developed by the California Department of Water Resources (DWR). DWR worked with local agencies, water suppliers, landscape industry groups and public interested parties to prepare the

current (2015) updated MWELO. The ordinance encourages limited use of turf areas and reduces landscape irrigation consumption by mandating high efficiency irrigation systems and low water use landscaping. The City conducts plan checking for compliance with the landscape ordinance prior to the construction of new and/or rehabilitated landscape sites.

3.7 Water Shortage Contingency Planning

The RUWMP participating agencies have elected to use the six standard shortage levels included in guidance documents prepared by DWR. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50- percent, and greater than 50-percent shortage compared to the normal reliability condition). These levels are identified in **Table 3-6**.

Table 3-6: Urban Water Shortage Contingency Plan Shortage Levels

Shortage Level	Shortage Range	Water Supply Condition
1	Up to 10%	Mandatory prohibitions defined by the State, ongoing rebate programs
2	Up to 20%	Outdoor water use restrictions on time of day, increased water waste patrols
3	Up to 30%	Outdoor water use restrictions on days per week, restrictions on filling swimming pools
4	Up to 40%	Limits on new landscaping, expanded public information campaign
5	Up to 50%	Limits on watering of parks or school grounds
6	Greater than 50%	No potable water use for outdoor purposes

Source: 2021 Coachella Water Authority & Sanitary District Water Shortage Contingency Plan

These supply reductions could be the result of a variety of potential causes including natural forces, system component failure or interruption, regulatory actions, contamination, or any combination of factors. CWA may need to activate shortage levels across its entire service area or within certain areas that are impacted by an event. The levels involve voluntary and mandatory conservation measures and restrictions, depending on the causes, severity, and anticipated duration of the water supply shortage. The locally appropriate shortage response actions that would be taken at each level to address the resulting gap between supplies and demands.

4 Public Water System – Projected Supply and Demand

Coachella Water Authority (CWA) projects that water use for the City will generally increase at a similar rate to that of the projected population increase within the City and its sphere of influence (SOI). For long-range planning, CWA continues to evaluate opportunities for transfers, exchanges, and other purchases of imported water to increase supply reliability.

CVWD and DWA collaborate to replenish the groundwater aquifer with imported water, creating a stored supply that can be used for emergencies or longer-term shortages. The RUWMP

participating agencies continue to implement water conservation measures and increase use of recycled water usage to reduce groundwater demand.

4.1 Projected Urban Demand and Supply

The following table from the 2020 Coachella Valley Regional UWMP provides the CWA's future water demand projections by water use sector over the next 20+ years. Potable water demand projections for the CWA service area are summarized in **Table 4-1**.

Table 4-1: CWA Projected Demands for Potable and Raw Water

Use Type	Projected Water Use				
	2025	2030	2035	2040	2045
Single Family	7,072	8,364	9,575	10,840	11,785
Multi-Family	1,005	1,189	1,422	1,799	2,342
Commercial / Industrial / Institutional	1,181	1,370	1,558	1,674	1,790
Landscape	935	1,096	1,257	1,449	1,641
Other	22	26	31	36	41
Losses	654	774	888	1,021	1,147
Total	**10,869**	**12,819**	**14,731**	**16,819**	**18,746**
NOTES: Units are Million Gallons (MG)					

Source: 2020 Coachella Valley Regional UWMP

4.2 Normal, Single-Dry, Multiple-Dry Year Comparison

The following tables from the 2020 Regional UWMP provide CWA's projected water supplies and demands in a normal year, single-dry year, and multiple-dry years. During normal years, CWA will be able to meet current and future urban water demand needs projected in the 2020 Regional UWMP as shown in **Table 4-2**.

Table 4-2: Normal Year Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
Difference	**0**	**0**	**0**	**0**	**0**

Source: 2020 Regional Urban Water Management Plan

Note: CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

During single-dry years, CWA will be able to meet current and future urban water demand needs as shown in **Table 4-3**. Water supplies during the single-dry year are 100 percent reliable. CVWD's groundwater replenishment program replenishes the basin to increase groundwater storage during wet years and that supply is available for use during dry years which benefits all water districts using groundwater, including CWA. Thus, the supply and demand comparison for the single-dry year is the same as the normal year.

Table 4-3: Single-Dry Year Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
Difference	**0**	**0**	**0**	**0**	**0**

Source: 2020 Regional Urban Water Management Plan

Note: CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

During multiple-dry years, CWA will be able to meet current and future urban water demand needs as shown in **Table 4-4**. Similar to the single-dry year, the multiple-dry year water supply reliability is 100 percent. Thus, the supply and demand comparison for the multiple-dry years is the same as the normal year. CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

Table 4-4: Multiple-Dry Years Supply and Demand Comparison

		2025	2030	2035	2040	2045
First Year	Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Difference	**0**	**0**	**0**	**0**	**0**
Second Year	Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Difference	**0**	**0**	**0**	**0**	**0**
Third Year	Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Difference	**0**	**0**	**0**	**0**	**0**
Fourth Year	Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Difference	**0**	**0**	**0**	**0**	**0**
Fifth Year	Supply Totals (AFY)	10,869	12,819	14,731	16,819	18,746
	Demand Totals (AFY)	10,869	12,819	14,731	16,819	18,746

	Difference	**0**	**0**	**0**	**0**	**0**

Source: 2020 Regional Urban Water Management Plan

Note: CWA and the other Regional UWMP agencies collaborate on groundwater management plans for long-term sustainability. During a normal year, single-dry year, or five-dry year period, the agencies could produce additional groundwater if demands exceeded the estimates shown here.

5 Project Description

The Coachella Airport Business Park Project (Project) is located in the eastern portion of the Coachella Valley within the incorporated limits of the City of Coachella, Riverside County as shown in **Figure 5-1: Project Regional Location Map**. The Project will be accessible from the southwestern frontage along Airport Boulevard and is bounded by an undeveloped property owned by CVWD to the north, SR-86 to the east, a mobile home park to the south, and the Coachella Valley Stormwater Channel to the west. The vicinity map is shown in **Figure 5-2: Project Vicinity Map**. The Project proposes to develop approximately 47.96 acres of vacant land in the Coachella Valley to include warehouses of varying sizes, commercial retail building buildings, personal vehicle storage, self-storage, a commercial retail land use comprised of a service station/mini mart and drive-thru fast food restaurant, open space, and a substation serviced by IID as shown below in **Figure 5-3: Project Site Plan** and **Table 5-1: Project Land Use Summary**.

Figure 5-1: Project Regional Location Map

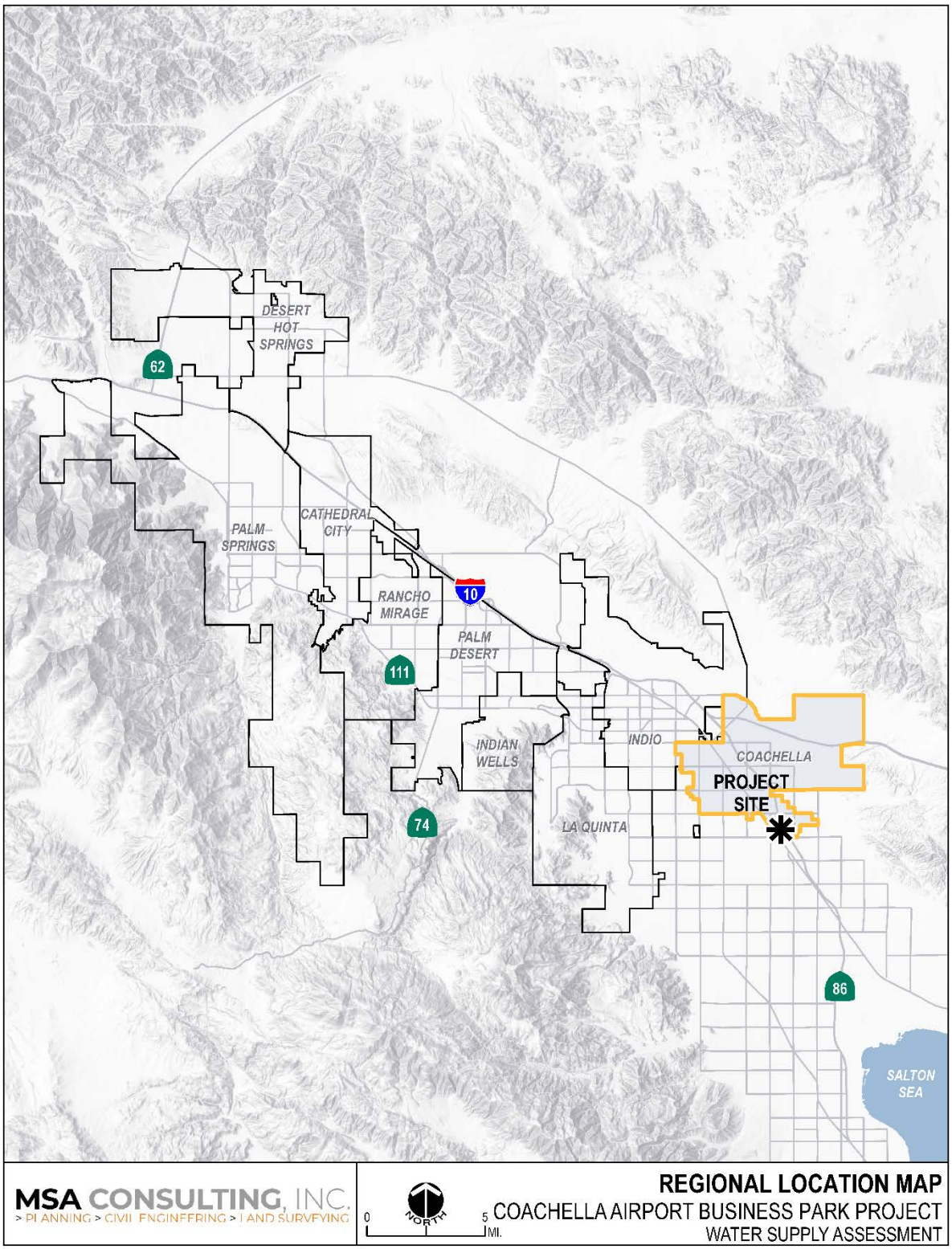


Figure 5-2: Project Vicinity Map

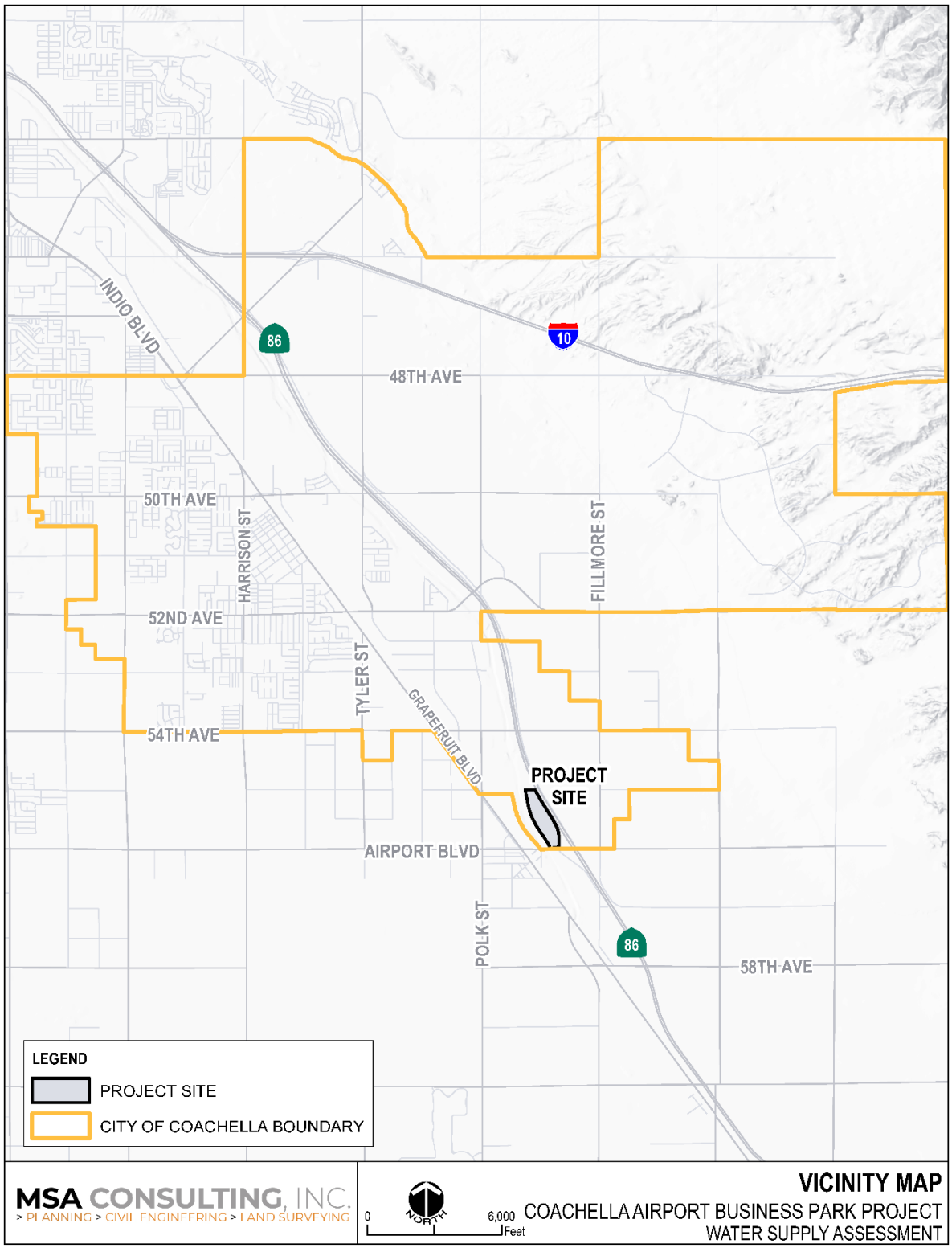


Figure 5-3: Project Site Plan

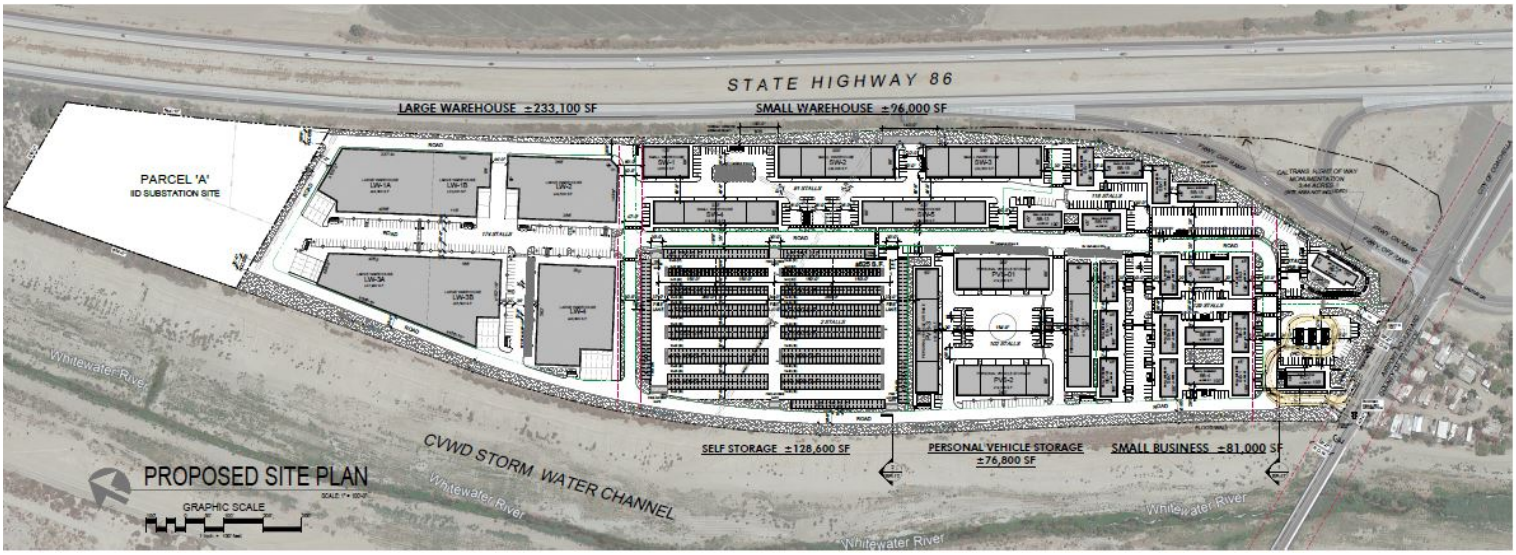


Table 5-1: Project Land Use Summary

Specific Plan/Land Use Designation	Land Area (Acres)	Non-Residential Building Area (ft^2)
Large Warehouses (Non-Cannabis)	4.6	135,340
Large Warehouses (Cannabis Cultivation)	4.6	97,760
Small Warehouses	4.6	96,000
Commercial/Retail Buildings	4.6	81,000
Personal Vehicle Storage	4.6	76,800
Self-Storage	6.3	128,600
Service Station/Mini Mart	0.06	4,000
Drive-Thru Fast-Food Restaurant	0.23	4,650
Substation	3.14	0
Open Space	2.50	0
Onsite Roads, Driveways, Parking Lots	12.73	0
Total	**47.96**	**624,150**

Acreages from Air Quality Energy, Greenhouse Gas Emissions and Health Risk Assessment Impact Analysis, Coachella Airport Business Park Project, Table H - CalEEMod Land Use Parameters from Appendix A in the project's IS/MND. Lot Acreage of 23.03 for "Large warehouses, small warehouses, personal vehicle storage, and small businesses" divided by 5 for Large Warehouse (Non-cannabis) with Cooling Tower, Large Warehouse (Cannabis Cultivation) with Cooling Tower, Small Warehouse, Commercial/ Retail Buildings, and Personal Vehicle Storage

6 Project Water Demands

The Coachella Airport Business Park Project (Project) proposes to develop approximately 47.96 acres of vacant land in the Coachella Valley to include 135,340 square feet (sf) of warehouses with a cooling tower, 97,760 sf of warehouses with cannabis cultivation and a cooling tower, 96,000 sf of small warehouses, 81,000 sf commercial land use, 128,600 sf of self-storage land use, 76,800 sf of personal vehicle storage, and retail land use including a service station/mini mart (4,000 SF) and drive-thru fast food restaurant (4,650 SF). Additionally, the project will have open space and an IID substation.

6.1 Projected Indoor Residential Water Demand

The Project does not propose residential uses, so the indoor residential water usage for this Water Supply Assessment (WSA) is 0.

6.2 Projected Indoor Commercial and Industrial Water Demand

The projected indoor commercial and industrial unit usage for this WSA are based on the American Water Works Association Research Foundations (AWWARF's) Commercial and Industrial End Uses of Water.

A reverse osmosis (RO) water purification treatment system is proposed for operation of cannabis cultivation for the proposed Project. RO water purification systems use a semipermeable membrane and high pressure to remove ions, molecules, and larger particles from water. RO systems typically require two to four gallons of water to make one gallon of RO water; therefore, water use would be increased as calculated below.

The projected indoor commercial and industrial water demand for the Project totals 136.95 AFY as shown in **Table 6-1**.

Table 6-1: Projected Indoor Commercial and Industrial Water Demand

Planning Area	Indoor Area (ft^2)	Water Demand Factor [1] (gal/sf/year)	Water Demand (gpd)	Water Demand [2] (AFY)
Large Warehouses (Non-Cannabis Uses) with Cooling Tower	135,340	35	12,977.81	14.54
Large Warehouses (Cannabis Cultivation) with Cooling Tower	97,760	331	88,653.59	99.30
Small Warehouses	96,000	15	3,945.21	4.42
Commercial/Retail Buildings	81,000	15	3,328.77	3.73
Personal Vehicle Storage	76,800	15	3,156.16	3.54
Self-Storage	128,600	15	5,284.93	5.92
Drive-Thru Fast Food Restaurant	4,650	331	4,216.85	4.72
Service Station/Mini Mart	4,000	64	701.37	0.79
Total	**624,150**		**122,264.68**	**136.95**

[1] AWWARF Commercial and Industrial End Uses of Water, 2000.

[2] One AFY = 892.742 gallons per day; Conversion used above.
Note: Large Warehouses (Non-Cannabis Cultivation) Water Demand Factor is 35 gal per square foot per year (Office 15 plus Cooling Tower 20 gal per sf per year)
Large Warehouses (Cannabis Cultivation) Water Demand Factor equals 331 due to the proposed cannabis cultivation practices using an RO system and a cooling tower.

6.3 Projected Outdoor Irrigation Water Demand

The projected outdoor irrigation water usage is based on the Maximum Applied Water Allowance (MAWA) equation from Appendix D of Coachella Valley Water District's (CVWD's) Landscape Ordinance No. 1302.5, which meets the water conservation goals of the California Department of Water Resources (DWR) Model Efficient Landscape Ordinance (MWELO). The projected outdoor irrigation water demand is 14.99 AFY as shown in **Table 6-2** below.

Table 6-2: Projected Outdoor Irrigation Water Demand

Planning Area	Landscaped Area (ft^2)	ETo (in/yr) [1]	ETAF [2]	Conversion Factor (gal/ft^2) [3]	Water Demand (gpd)	Water Demand (AFY)
Large Warehouses (Non-Cannabis) with Cooling Tower	20,037.60	76.46	0.45	0.62	1,171.09	1.31
Large Warehouses (Cannabis Cultivation) with Cooling Tower	20,037.60	76.46	0.45	0.62	1,171.09	1.31
Small Warehouses	20,037.60	76.46	0.45	0.62	1,171.09	1.31
Commercial / Retail Buildings	40,075.20	76.46	0.45	0.62	2,342.19	2.62
Personal Vehicle Storage	20,037.60	76.46	0.45	0.62	1,171.09	1.31
Self-Storage	27,442.80	76.46	0.45	0.62	1,603.89	1.80
Service Station / Mini Mart	261.36	76.46	0.45	0.62	15.28	0.02
Drive-Thru Fast Food Restaurant	1,001.88	76.46	0.45	0.62	58.55	0.70
Substation	13,677.84	76.46	0.45	0.62	799.40	0.90
Open Space	10,890.00	76.46	0.45	0.62	636.46	0.71
Onsite Roads, Driveways, Parking Lots	55,451.88	76.46	0.45	0.62	3,240.87	3.63
Total	**228,951.36**				**13,381.01**	**14.99**

[1] Reference Evapotranspiration (ETo) for ETo Zone 4 from CVWD Landscape Ordinance 1302.5, Appendix C
[2] Evapotranspiration Adjustment Factor (ETAF) from CVWD Landscape Ordinance 1302.5, Appendix D
[3] Conversion Factor from CVWD Landscape Ordinance 1302.5, Appendix D

6.4 Projected Outdoor Water Features Demand

The Project does not propose outdoor recreational water feature usage, so the projected outdoor water features demand for the Project is 0.

6.5 Projected Total Water Demand

The total projected water demand for the Project is 151.94 AFY, or 3.17 acre-feet per acre, as shown in **Table 6-3** below.

Table 6-3: Projected Total Water Demand

Planning Area	Land Area (Acres)	Indoor Commercial and Industrial Demand (AFY)	Outdoor Irrigation Demand (AFY)	Total Water Demand (AFY)
Large Warehouses (Non-cannabis) with Cooling Tower	4.60	14.54	1.31	15.85
Large Warehouses (Cannabis Cultivation) with Cooling Tower	4.60	99.30	1.31	100.62
Small Warehouses	4.60	4.42	1.31	5.73
Commercial/Retail Buildings	4.60	3.73	2.62	6.35
Personal Vehicle Storage	4.60	3.54	1.31	4.85
Self-Storage	6.30	5.92	1.80	7.72
Service Station/Mini Mart	0.06	0.79	0.02	0.80
Drive-Thru Fast Food Restaurant	0.23	4.72	0.07	4.79
Substation	3.14	N/A	0.90	0.90
Open Space	2.50	N/A	0.71	0.71
Onsite Roads, Driveways, Parking Lots	12.73	N/A	3.63	3.63
Total	**47.96**	**136.95**	**14.99**	**151.94**

6.6 Projected Water Sources

The Project is anticipated to utilize the CWA Domestic System to provide water service to the Project site, as shown on **Table 6-4.**

Table 6-4: Projected Water Sources

Planning Area	Land Area (Acres)	Water Source
Large Warehouses (Non-Cannabis)	4.6	CWA Domestic System
Large Warehouses (Cannabis)	4.6	
Small Warehouses	4.6	
Commercial/Retail Buildings	4.6	
Personal Vehicle Storage	4.6	
Self-Storage	6.3	

Service Station/Mini Mart	0.06	
Drive-Thru Fast Food Restaurant	0.23	
Substation	3.14	
Open Space	2.5	
Onsite Roads, Driveways, Parking Lots	12.73	

6.7 Conservation Measures

The following section describes the water conservation measures to be implemented by the proposed Project.

6.7.1 Project Specific Water Conservation Measures

Project developers will be required to implement the following measures in order to assure the most efficient use of water resources and to meet and maintain the most recent UWMP goals throughout the life of the Project:

1. In addition to following DWR's MWELO, to the greatest extent practicable, native plant materials and other drought-tolerant plants shall be used in all non-turf areas of Project landscaping. Large expanses of lawn and other water-intensive landscaped areas shall be kept to the minimum necessary and consistent with the functional and aesthetic needs of the Project, while providing soil stability to resist erosion.

2. In the event recycled water becomes available to the Project, the potential use of tertiary treated water will be reviewed to determine feasibility of its use for on-site landscaped areas to reduce the use of groundwater for irrigation.

3. The installation and maintenance of efficient on-site irrigation systems will minimize runoff and evaporation and maximize effective watering of plant roots. Drip irrigation and moisture detectors will be used to the greatest extent practicable to increase irrigation efficiency.

4. The use of low-flush toilets and water-conserving faucets shall be required in conformance with Section 17921.3 of the Health and Safety Code, Title 20, California Code of Regulations Section 1601(b), and applicable sections of Title 24 of the State Code.

7 Assessment – Availability of Sufficient Supplies

7.1 Water Supply Assessment

Based on the analysis in this Water Supply Assessment (WSA), the projected total water demand for the Coachella Airport Business Park (Project) will be 151.94 acre-feet per year (AFY), or 3.17 acre-feet per acre. CWA's long-term water management planning ensures that adequate water supplies are available to meet existing and future water needs within its service area. CWA's urban water demand for 2023 was 7,189 Acre Feet (AF), and CWA's projected urban water demand for 2025 is 10,869 AF. Additionally, CWA's projected urban water demand for 2045 is 18,746 AF.

This Project's water demand of 151.94 AFY accounts for approximately 4.1 percent of the total planned increases in demand of 3,680 AF from 2023 to 2025 and accounts for approximately 1.9 percent of the total planned increase in demand of 7,877 AF from 2025 to 2045.

This WSA provides an assessment of the availability of sufficient water supplies during normal, single-dry, and multiple-dry years over a 20-year projection to meet the projected demands of the Project, in addition to existing and planned future water demands of CVWD, as required by Senate Bill (SB) 610 and SB 1262. This WSA also includes identification of existing water supply entitlements, water rights, water service contracts, and agreements relevant to the identified water supply for the Project and quantities of water received in prior years pursuant to those entitlements, rights, contracts, and agreements.

This WSA has been prepared in compliance with the requirements of SB 610 and SB 1262 by MSA Consulting Inc. in consultation with CWA and the City of Coachella. This WSA does not relieve the Project from complying with all applicable state, county, city, and local ordinances or regulations including the Department of Water Resources (DWR) Model Water Efficient Landscape Ordinance (MWELO), and indoor water use performance standards provided in the California Water Code now or in the future.

Consistent with the provisions of SB 610, neither this WSA nor its approval shall be construed to create a right or entitlement to water service or any specific level of water service, and shall not impose, expand, or limit any duty concerning the obligation of CVWD to provide certain service to its existing customers or to any future potential customers.

This WSA does not constitute an agreement to provide water service to the Project, and does not entitle the Project, Project applicant, or any other person or entity to any right, priority, or allocation in any supply, capacity, or facility. To receive water service, the Project will be subject to an agreement with CVWD, together with any and all applicable fees, charges, plans and specifications, conditions, and any and all other applicable CVWD requirements in place and as amended from time to time. Nor does anything in this WSA prevent or otherwise interfere with CVWD's discretionary authority to declare a water shortage emergency in accordance with the Water Code.

This WSA will be reviewed every five years, or in the event that the water planning assumptions have changed, until the Project begins construction to ensure it remains accurate and no significant changes to either the Project or available water supply has occurred. The Project applicant shall notify CVWD when construction of the Project begins.

7.2 Requirement for Written Verification of Water Supply Availability

Government Code §66473.7 requires that a Written Verification of Water Supply (WV) be prepared in connection with the approval of a development agreement or tentative map that includes a subdivision. A subdivision is defined as a proposed residential development of more than 500 units, except that for a water agency with fewer than 5,000 service connections, a subdivision includes a residential development project that would account for an increase of 10 percent or more in the number of the agency's existing service connections. Due to the lack of residential development in the Coachella Airport Business Park Project, a WV is not required.

This WSA is not a WV. If the County of Riverside determines that the Project or any planning area meets the definition of a subdivision and therefore requires preparation of a WV, the County of Riverside must request a WV prepared by CWA in compliance with the requirements of SB 221. This WSA may be used to support the WV. Depending on circumstances including but not limited to new water efficiency regulations or changes in water supply availability, CWA may recommend preparation of an updated supply and demand assessment to support the WV.

8 References

American Water Works Association Research Foundation, *Commercial and Institutional End Uses of Water*, 2000

California Department of Water Resources, *Final State Water Project Delivery Capability Report 2019*, August 2020

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Coachella Valley Water District, *Landscape Ordinance 1302.5*, July 2020

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