Appendix L

Water Supply Assessment



Water Supply Assessment Report Aquabella Specific Plan Update

Section I: Introduction

I.1 Purpose

Water Code §10910 (a)(b)(c)

The purpose of this Water Supply Assessment (WSA) Report is to satisfy the requirements of Water Code §10910 et seq. and Government Code §66473.7 as amended by Senate Bill 610 (SB 610) and Senate Bill 221 (SB 221) in 2001. SB 610 focuses on the content of a water supply agency's Urban Water Management Plan (UWMP) and stipulates that when a project is subject to the California Environmental Quality Act (CEQA) and exceeds project size thresholds defined in the California Water Code, the appropriate water supply agency must provide an assessment on whether its total projected water supplies will meet the projected water demand associated with the proposed project. SB 610 applies to proposed residential developments of more than 500 dwelling units, or commercial, industrial, or mixed-use developments that exceed various thresholds for size. SB 221 requires water supply verification when a tentative map, parcel map, or development agreement for a project is submitted to a land use agency for approval. SB 221 applies to proposed residential developments of more than 500 dwelling units (with some exceptions). The need for an assessment or verification is determined by the lead agency for a project.

I.2 Project Description

The City of Moreno Valley is the lead agency for the preparation of an environmental document as required by CEQA for the proposed Aquabella Specific Plan Update Project (Project). The Project proposes construction of approximately 15,000 very-high density multi-family residential dwelling units with a proposed density of 25 to 50 dwelling units per acre along with 40 acres of schools, 40 acres of parks, a 40-acre multi-purpose lake, and a 25-acre mixed-use town center including a 300-unit hotel. The Project will be located south of Brodiaea Avenue and north of Iris Avenue between Lasselle Street and Oliver Street on approximately 650 acres. The developer for the Project is T/Cal Realty II, an affiliate of Highland Fairview, and the location is shown in Figure 2.

I.3 Projected Water Demand

Water Code §10910 (c)(1)

In the Eastern Municipal Water District's (EMWD) 2020 UWMP, the demand projections for the parcels covering the project site were estimated based on commercial office, medium density residential, and open space conservation land uses, with a total demand of 1,592 acre-feet per year (AFY). The total water demand for this project is estimated to be up to 3,519 AFY. The developer may be able to offset approximately 412 AFY of the project's required potable supply through the use of recycled water and a private on-site well, which would potentially reduce the annual demand to approximately 3,107 AFY. At this time, the potential supply offsets proposed by the developer are speculative, and to be conservative, the WSA will evaluate the full demand of 3,519 AFY. The total water demand projected for this project represents an increase in the limits of estimated demand considered in the 2020 UWMP. However, the cumulative demand from this project and other new/planned developments that are being tracked in EMWD's service area remain within the level of demand accounted for in the 2020 UWMP. The specific facilities

needed to serve the Project's water demands will be defined in the design conditions phase of EMWD's New Development Process.

I.4 Requirements

The City of Moreno Valley has requested that EMWD prepare a WSA for the Project. Although the land use changes proposed by the Project would increase demands compared to what was considered in the 2020 UWMP, EMWD has planned for this possibility by including a planning buffer when projecting the demands considered in the 2020 UWMP. After accounting for the cumulative demands from the Project and other developments in EMWD's service area (including other WSAs), over 10,000 AFY of buffer remains. This buffer is expected to grow in the future due to factors such as ongoing water use efficiency legislation and potable water offsets from recycled water conversions. Accordingly, demands from new developments in EMWD's service area, including the Project, ultimately fall within the levels of demand considered in the 2020 UWMP. As authorized by Water Code §10910 (c) (2) – (3), EMWD has elected to incorporate information from the 2020 UWMP in this WSA (attached as Appendix A).

In accordance with Water Code §10910 (d) – (f), the WSA shall:

- 1. Identify any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the Project, and provide a description of the quantities of water received in prior years by the public water system under existing water supply entitlements, water rights, water service contracts;
- 2. If no water has been received in prior years by the public water system, identify other public water systems of 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; and
- 3. If groundwater is included in the proposed supply, identify the groundwater basin or basins from which the Project will be supplied and include any applicable documentation of adjudicated rights to pump. If the basin is not adjudicated, regardless of whether the basin has been identified as over drafted, provide a detailed description and analysis of the amount and location of groundwater pumped by the public water system for the past five years from any groundwater basin from which the Project will be supplied; and provide a detailed description and analysis of the amount and location of groundwater from the basin or basins from which the Project will be supplied to meet the projected water demand associated with the Project.

If the proposed Project includes a "subdivision" of more than 500 residential dwelling units as defined by Government Code §66473.7 (a)(1), the public water system shall also provide verification as to whether the public water system is able or unable to provide a sufficient water supply based upon an analysis of whether water supplies available during normal, single-dry, and multiple-dry years within a 20-year projection will meet the projected demand associated with the proposed subdivision which considers:

- 1. The historical record for at least 20 years;
- 2. The applicability of any urban water shortage contingency analysis;
- 3. The reduction in water supply for "specific water use sector" per an adopted resolution, ordinance, or contract; and

4. The amount of water that can be reasonably relied upon from specified supply projects.

This assessment is a technical, informational, and advisory opinion only. It is a supporting document for an environmental document and is not a commitment by EMWD to supply water for the Project. The information included is based on information available at the time of the report and changing circumstances could affect EMWD's water supply evaluation presented in this document.

This assessment does not specifically address funding of new or existing supplies. The cost of water supplies will increase over time and the developer of this Project may be required to fund the acquisition of new, supplemental supplies, treatment facilities, potable, wastewater, or recycled water infrastructure, and water efficiency measures for existing customers. The extent of additional funding will be determined by EMWD and may take the form of a new component of connection fees or a separate charge. New customers may also be required to pay a higher commodity rate for water used than existing customers to help offset the rising costs of new supplies.

Prior to project construction, the developer of the Project is required to meet with EMWD staff to establish development design conditions, which will detail water, wastewater, and recycled water requirements to serve the Project. If there is a change in the circumstances detailed in this assessment, EMWD will address the changes in the development design conditions for the Project. Modifications at the development design conditions stage could reduce the amount of water available to serve the Project.

I.5 Background

EMWD was formed in 1950 and annexed into the Metropolitan Water District of Southern California (Metropolitan) in 1951, to deliver imported water. In 1971, EMWD assumed the additional role of a groundwater producer with the acquisition of the Fruitvale Mutual Water Company. Presently, EMWD's supply portfolio includes desalinated brackish groundwater, recycled water, potable groundwater and imported water.

EMWD provides both retail and wholesale water supplies to a service area encompassing approximately 558 square miles with an estimated population of over 888,000 people. Agencies through which EMWD provides water supplies indirectly via wholesale service include the following:

- City of Hemet Water Department
- City of Perris and the North Perris Water System
- City of San Jacinto Water Department
- Lake Hemet Municipal Water District (LHMWD)
- Murrieta Division of Western Municipal Water District (WMWD Murrieta)
- Nuevo Water Company (NWC)
- Rancho California Water District (RCWD)

I.6 Urban Water Management Plan

The 2020 UWMP was adopted by the EMWD Board of Directors on June 30, 2021. This plan documents EMWD's projected supplies and demands in five-year increments through the year

2045, certifies EMWD's compliance with water use efficiency targets defined in the Water Conservation Act of 2009, and demonstrates EMWD's supply reliability, even under dry year hydrologic conditions lasting multiple years. Approximately half of EMWD's existing and future retail demand will be supplied through local sources such as groundwater, brackish groundwater desalination, and recycled water, with the balance coming from imported water delivered by Metropolitan Water District (Metropolitan). Demands shown in the 2020 UWMP are not project specific, but rather, projected in aggregate using the best available current and planned land use information over EMWD's entire service area. The 2020 UWMP relies heavily on information and assurances contained within Metropolitan's 2020 Urban Water Management Plan (Metropolitan UWMP) when evaluating service area supply reliability. The 2020 Metropolitan UWMP is attached as Appendix B.

I.7 Population Projection

The population projections for EMWD's service area were updated in the 2020 UWMP using information obtained from the most recent regional transportation plan/sustainable communities strategy completed by the Southern California Association of Governments (SCAG). This study, known as Connect SoCal, forecasted regional growth through 2045, and was adopted by SCAG on September 3, 2020. The data available from Connect SoCal includes projections of population, households, and employment within each of SCAG's Traffic Analysis Zones, which closely resemble block groups in the United States Census.

Consistent with the significant percentage of undeveloped land within EMWD's service area, growth is anticipated to continue throughout the 2020 UWMP's 25-year planning horizon (as shown in Table 1). Currently, approximately 40 percent of EMWD's service area is built out. As population and the associated water demands increase, EMWD will continue to proactively manage its water supply portfolio through the development of local resources in conjunction with additional imported water purchases from Metropolitan as outlined in the 2020 UWMP.

TABLE 1: PROJECTED POPULATION

Population Served	2020	2025	2030	2035	2040	2045
Retail	603,950	649,700	695,500	741,300	774,300	807,200
Wholesale	255,210	271,500	287,800	304,000	314,000	324,100
Total	859,160	921,200	983,300	1,045,300	1,088,300	1,131,300

Section II: Identification of Supplies and Description of Quantities

Water Code §10910 (d)(1)

II.1 Overview of Supplies

EMWD has four sources of water supply: imported water purchased from Metropolitan, potable groundwater, desalinated brackish groundwater, and recycled water.

A. Retail Water Supply Portfolio

Approximately half of EMWD's retail demands are supplied through local water sources, which consists of potable groundwater, desalinated brackish groundwater, and recycled water. The remaining demands are supplied by a mix of raw and treated water purchased from Metropolitan. EMWD treats most of its raw water for potable use at two water filtration plants,

located in Perris and Hemet. A small quantity of raw water is supplied directly to agricultural customers.

Over the past five years, EMWD's retail water supply portfolio averaged approximately 49 percent imported water, ten percent groundwater, six percent desalinated brackish groundwater, and 35 percent recycled water. An annual breakdown of EMWD's retail water supplies over this five-year period is shown in Table 2. The proportions of local to imported water supplies are impacted by EMWD's participation in Metropolitan's cyclic storage program in 2019, where Metropolitan offered an incentive for member agencies to voluntarily reduce local groundwater production and purchase additional imported water due to wet hydrologic conditions at the time.

TABLE 2: RETAIL WATER SUPPLY PORTFOLIO, PAST 5 YEARS (AFY)

Туре	Source	2018	2019	2020	2021	2022
Imported –	Metropolitan	42,419	41,167	44,726	44,870	37,208
Treated ⁽¹⁾	Water District	42,413	41,107	44,720	44,670	37,200
Imported –	Metropolitan	18,288	18,969	17,584	18,028	24,380
EMWD Treated	Water District	10,200	10,909	17,364	10,020	24,380
Imported – Raw ⁽²⁾	Metropolitan	503	501	642	547	216
imported – Kaw	Water District	303	301	042	347	210
	San Jacinto					
Groundwater ^{(3),(4)}	Groundwater	13,605	8,044	14,410	14,945	12,369
	Basin					
	San Jacinto					
Desalination	Groundwater	7,544	7,433	7,310	7,653	10,850
	Basin					
	Regional Water					
Recycled Water ⁽⁵⁾	Reclamation	44,016	40,676	39,642	46,042	51,601
	Facilities					
	Total	126,375	116,790	124,314	132,085	136,624

^{1.} EMWD increased treated imported water purchases in 2019 to offset groundwater pumping reductions made as part of its participation in Metropolitan's Cyclic Storage Program.

B. Wholesale Water Supply Portfolio

EMWD imports raw and treated water from Metropolitan to supplement the local water supplies of its wholesale agencies. In addition, EMWD has agreements to provide recycled water to some of its wholesale agencies. An annual breakdown of EMWD sales to wholesale agencies is shown in Table 3. Note that this table only documents sources of water sold by EMWD on a wholesale basis and does not include local supplies (such as groundwater) available and used by EMWD's wholesale agencies to meet customer demands.

^{2.} Raw water total does not include replenishment water recharged under the Soboba Settlement Agreement.

^{3.} Groundwater totals may include raw, brackish groundwater used to augment recycled water system for agricultural use.

^{4.} A portion of the San Jacinto Groundwater Basin is adjudicated under the Hemet-San Jacinto Watermaster. EMWD pumping in this portion is subject to an adjusted base production right. EMWD also receives pumping credits for a portion of any Soboba Settlement recharge water unused by the Soboba Tribe.

^{5.} Recycled water total excludes discharge but includes system losses (such as storage pond evaporation and incidental recharge). Due to the interconnected nature of EMWD's recycled water system, it is difficult to split retail and wholesale losses, therefore all recycled water losses are reported with the retail portfolio.

TABLE 3: WHOLESALE WATER SUPPLY PORTFOLIO, PAST 5 YEARS (AFY)

Туре	Source	2018	2019	2020	2021	2022
Imported –	Metropolitan	14672	11.070	15 000	12 001	15 200
Treated	Water District	14,672	11,070	15,008	13,081	15,389
Imported –	Metropolitan	14 205	11 202	14.000	12 700	10.040
Raw	Water District	14,385	11,293	14,909	12,798	18,949
Imported –	Metropolitan	4 702	20.720	C C 47	0	0
Recharge (Raw)	Water District	trict 4,783 2	20,730	6,647	0	0
	Regional Water					
Recycled Water	Reclamation	1,878	1,619	1,285	1,757	1,793
	Facilities					
	Total	35,718	44,712	37,849	27,636	36,131

- 1. Table does not include local supply sources used by suppliers to which EMWD provides wholesale service.
- 2. Raw water is imported and recharged by EMWD, LHMWD, and the Cities of Hemet and San Jacinto for the Soboba Tribe under the Soboba Settlement Agreement, which requires a long-term average of 7,500 AFY to be recharged. Metropolitan can pre-deliver recharge water. The annual volume of the 7,500 AFY requirement unused by the Soboba Tribe is credited to the agencies for use.
- 3. Due to the interconnected nature of EMWD's recycled water system, it is difficult to distinguish between retail and wholesale losses, therefore, all recycled water losses are reported in Table 2, which documents retail water supplies.

C. Projected Future Water Supply Portfolios

As development increases the water demands within EMWD's service area, it is anticipated that new demands will be met through a combination of additional imported water from Metropolitan and the development of local supply projects including increased production of potable groundwater, desalination of brackish groundwater, and use of recycled water. EMWD also plans to continue its efforts to enhance water use efficiency within its service area. Table 4 and Table 5 show EMWD's projected water supplies for both retail and wholesale service throughout the planning horizon set within its UWMP. These estimates do not account for all potential new local supply projects that could potentially be developed by EMWD or by agencies to which EMWD provides wholesale service.

TABLE 4: PROJECTED RETAIL WATER SUPPLIES - AVERAGE YEAR HYDROLOGY

Туре	Source	2025	2030	2035	2040	2045
Imported	Metropolitan Water District	66,447	72,147	70,247	74,747	78,847
	San Jacinto					
Groundwater	Groundwater Basin	18,753	18,753	18,753	18,753	18,753
Desalination	San Jacinto	13,400	13,400	13,400	13,400	13,400
Desamilation	Groundwater Basin	13,400				
Other	Purified Water	4,000	4,000	12,000	12,000	12,000
Other	Replenishment	4,000	4,000	12,000	12,000	12,000
	Regional Water					
Recycled Water	Reclamation	39,230	44,920	42,200	47,500	51,800
	Facilities					
	Total	141,830	153,220	156,600	166,400	174,800

- 1. Imported water total represents planned EMWD purchases, not the maximum volume of water available from Metropolitan.
- 2. Groundwater total includes only 7,303 AFY of pumping from the adjudicated Hemet/San Jacinto Management Plan Area, which is EMWD's long term adjusted base production right. EMWD is also able to pump a portion of water recharged under the Soboba Settlement Agreement that is not used by the Soboba Tribe. EMWD is also able to carry over production rights into future years. As of the end of calendar year 2022, EMWD has accrued a carry-over credit balance of over 28,000 acre-feet.
- 3. Purified Water Replenishment is a planned indirect potable reuse project.
- 4. Recycled water supply total excludes volumes to be recharged under Purified Water Replenishment to avoid double counting as well as projected losses due to evaporation and incidental storage pond percolation.

TABLE 5: PROJECTED WHOLESALE WATER SUPPLIES - AVERAGE YEAR HYDROLOGY

Туре	Source	2025	2030	2035	2040	2045
Imported	Metropolitan Water District	50,700	44,900	46,900	49,200	51,300
Imported	Soboba Settlement Water	7,500	7,500	7,500	7,500	7,500
Recycled Water	Regional Water Reclamation Facilities	4,770	5,180	5,600	5,600	5,600
	Total	62,970	57,580	60,000	62,300	64,400

- 1. Imported water total represents planned EMWD purchases, not the maximum volume of water available from Metropolitan.
- 2. Under the Soboba Settlement Agreement, Metropolitan must provide an annual average of 7,500 AFY of recharge water, however, this water can be pre- or post-delivered based on supply availability and coordination between Metropolitan and EMWD.
- 3. Due to the interconnected nature of EMWD's recycled water system, losses can be hard to allocate between retail and wholesale service for simplicity, all recycled water losses are excluded from wholesale and shown in the retail table instead.

II.2 Wholesale Water Supplies

A. Written Contracts or Other Proof of Entitlement

Water Code §10910 (d)(2)(A)

EMWD is one of the 26 member agencies that make up Metropolitan. The statutory relationship between Metropolitan and its member agencies establishes the scope of EMWD's entitlements from Metropolitan. Typically, Metropolitan does not set limits on the quantity of supply available to member agencies and Metropolitan has provided evidence in the 2020 Metropolitan UWMP

that its supplies will meet member agency demands during normal, single-dry, and multiple-dry years within a 20-year projection.

During shortage events, the Metropolitan Water Supply Allocation Plan (WSAP) is implemented in order to promote a reduction in demand by member agencies. Member agencies are allocated a portion of their anticipated demand with the assurance that a member agency will not see a retail shortage greater than the regional shortage. The WSAP includes adjustments for member agency population growth and investments in local resources. Member agency purchases are not limited under the WSAP, but any amount purchased over a member agency's allocation is charged at a much higher rate.

B. Metropolitan Water Supplies

EMWD relies on Metropolitan to provide approximately half of its retail water supply. The northern portion of EMWD's service area is supplied by Metropolitan's Mills Water Filtration Plant (WFP), while the southern portion of EMWD's service area is supplied by Metropolitan's Skinner WFP. Untreated water from Metropolitan is primarily treated at EMWD's Perris and Hemet WFPs with a small quantity that is delivered directly to agricultural customers. EMWD also imports water from Metropolitan to supply wholesale customers.

EMWD plans to supply new water demands through a combination of additional imported water purchases from Metropolitan, as well as ongoing projects and programs expanding EMWD's local water supply portfolio. The 2020 Metropolitan UWMP provides information about Metropolitan's supply reliability and projected demands. In this document, Metropolitan states that it will be able to reliably supply projected member agency demands through 2045 even under historic single-dry and multiple-dry years. Unprecedented shortages are addressed in the Water Shortage Contingency Analysis and Catastrophic Supply Interruption Planning portions of the 2020 Metropolitan UWMP.

EMWD actively coordinated with Metropolitan staff during the development of the 2020 Metropolitan UWMP, however, note that Metropolitan does not provide supply projections for each member agency; instead, Metropolitan uses a regional approach to developing projections. Demand for the entire Southern California region is calculated, and then, based on available information about existing and proposed local projects, Metropolitan determines the amount of imported water needed during future years. The 2020 Metropolitan UWMP is included as Appendix B of this WSA.

II.3 Local Water Supplies

Water Code §10910 (d)

EMWD has made extensive investments in local water supply sources to increase system resiliency and reduce dependence on imported water from Metropolitan. These local resources include potable groundwater, desalinated brackish groundwater, and recycled water.

A. Groundwater

Water Code §10910 (f)

Groundwater information is included in this assessment to assist the lead agency in determining the adequacy of EMWD's total supply. While EMWD does not plan to develop new groundwater supplies specifically for this project, the advancement of new local supplies represents a major

component of EMWD's planned water supply portfolio. Therefore, new developments, including the Project, may be supplied with a combination of additional imported water and/or projects and programs expanding EMWD's local supplies, including groundwater.

i. Urban Water Management Plan Review Water Code §10910 (f)(1)

The 2020 UWMP discusses projected groundwater use by EMWD and explains assumptions made about groundwater. In the following sections, portions of the 2020 UWMP are summarized or excerpted below for informational purposes.

*ii. Groundwater Basin Description*Water Code §10910 (f)(2)

EMWD's service area overlies the San Jacinto Groundwater Basin, which is primarily comprised of alluvium-filled valleys carved into the elevated bedrock plateau of the Perris Block. The San Jacinto Groundwater Basin is generally considered a closed basin surrounded by impermeable bedrock mountains and hills. For groundwater management plan and reporting purposes, the San Jacinto Groundwater Basin is further separated into the Hemet/San Jacinto Management Plan Area, where the San Jacinto Fault Zone strongly influences the groundwater hydrology and is adjudicated under the Hemet-San Jacinto Watermaster, and the West San Jacinto Management Plan Area, for which EMWD is the designated Groundwater Sustainability Agency (GSA).

The San Jacinto Groundwater Basin is delineated into eight groundwater management zones (GMZ) based on groundwater flow, groundwater divides, and changes in groundwater quality. The Hemet/San Jacinto Management Area is comprised of the Hemet South, Canyon, and San Jacinto Upper Pressure GMZs, as well as the Hemet North portion of the Lakeview/Hemet North GMZ. The West San Jacinto Basin covers the Perris North, Perris South, San Jacinto Lower Pressure, and Menifee GMZs, and the Lakeview portion of the Lakeview/Hemet North GMZ. EMWD produces water for potable use or blending in four of the GMZs: Perris North, Hemet South, San Jacinto Upper Pressure and Canyon. Desalter wells are located in the Perris South and Lakeview/Hemet North GMZs.

Detailed descriptions of each Management Zone and other additional information may be found in Chapter 6 of the 2020 UWMP attached as Appendix A of this WSA.

iii. Groundwater Management Water Code §10910 (f)(2)

The San Jacinto Groundwater Basin is managed under two groundwater management plans. The Hemet/San Jacinto Groundwater Management Plan (HSJ Management Plan) covers the Hemet South, Canyon, San Jacinto Upper Pressure, and Hemet North portion of the Lakeview/Hemet North Groundwater Management Zones. The West San Jacinto Groundwater Basin Management Plan (WSJ Management Plan) covers the Perris North, Perris South, San Jacinto Lower Pressure, Menifee, and the Lakeview portion of the Lakeview/Hemet North Management Zones.

(1) Hemet/San Jacinto Groundwater Management Plan

In 2001, the Cities of Hemet and San Jacinto, LHMWD, EMWD, and representatives of the private groundwater producers, with the Department of Water Resources (DWR) acting as an impartial mediator, began working on a groundwater management plan for the Hemet/San

Jacinto Basin. The group discussed and resolved several controversial issues, including San Jacinto Tunnel seepage water, the Fruitvale Judgment and Decree, export of groundwater from the basins, and how to maximize the use of recycled water. As a result of their efforts, a final HSJ Management Plan was completed in 2007, and a Stipulated Judgment was entered with the Superior Court of the State of California for the County of Riverside in April of 2013.

The HSJ Management Plan:

- Limits the amount of water being extracted from the basin free of the replenishment charge to a sustainable yield
- Implements continued recharge of the basin using imported water through the Integrated Recharge and Recovery Program (IRRP)
- Ensures settlement claims by the Soboba Tribe are facilitated and accommodated
- Expands the existing water production and water services system to meet future urban growth through the use of imported water recharged into the basin
- Protects and/or enhances water quality in the Hemet/San Jacinto Basin
- Supports cost-effective water supplies and treatment by the public agencies
- Eliminates groundwater overdraft and enhances basin yield
- Continues the monitoring program to promote and provide for best management and engineering principles to protect water resources

Long-term groundwater management includes plans for artificial recharge using Metropolitan replenishment water via permanent facilities through the IRRP Program. An agreement with the Soboba Tribe requires Metropolitan to deliver, on average, 7,500 AFY of water for the next 30 years to EMWD, LHMWD, and the cities of Hemet and San Jacinto to be recharged into Hemet/San Jacinto Basin, fulfilling the Soboba Tribe's water rights, and addressing chronic groundwater overdraft. Since this agreement has gone into effect, Metropolitan has fulfilled the average requirement of 7,500 AFY and in addition, has made pre-deliveries to buffer against dry periods where replenishment water may not be readily available.

EMWD's has the right to a long-term adjusted base production right of 7,303 AFY of groundwater under the HSJ Management Plan. EMWD's base production right was gradually adjusted downward on an annual basis until the long-term value was reached in 2019. EMWD also receives credit to pump a portion of any amount of water recharged under the Soboba Settlement Agreement that is not used by the Soboba Tribe. Volumes of EMWD's adjusted base production right and unused recharge water can be carried over into future years. Any pumping above these amounts is subject to replenishment fees.

(2) San Jacinto Groundwater Basin Groundwater Sustainability Plan

In the West San Jacinto area, a cooperative groundwater management plan helps insure the reliability and quality of the water supply. In June 1995, EMWD adopted the WSJ Management Plan in accordance with the statutes in the California Water Code §10750 through §10755 resulting from the passage of AB 3030. The plan was adopted after extensive public outreach and meetings with interested individuals and agencies.

Implementation of the WSJ Management Plan began directly after its adoption. Initial efforts to implement the WSJ Management Plan included establishing an advisory committee;

prioritizing the management zones; evaluating groundwater resources including establishing groundwater quality, level, and extraction monitoring programs; and conducting hydrogeophysical investigations. The West San Jacinto Groundwater Basin Management Plan Annual Report, which had been published annually since 1996, has been superseded by the San Jacinto Groundwater Basin GSP Annual Report.

The Sustainable Groundwater Management Act (SGMA) was passed into law in 2014, and required that medium and high priority groundwater basins designated by the DWR be managed by GSAs. The San Jacinto Groundwater Basin was deemed a high priority basin by the DWR. Subsequently, EMWD notified the DWR of its intent to become the GSA for the non-adjudicated portion of the San Jacinto Groundwater Basin in January 2017. EMWD performed an extensive public outreach effort to ensure that the interests of all beneficial uses and users of groundwater would be considered in the process of forming the GSA, and in the development and implementation of this GSP. After EMWD staff conducted public workshops, reached out to stakeholder agencies (e.g., cities, counties, water districts, watermasters, and state agencies), and circulated notices in the press, the EMWD Board of Directors approved Resolution No. 2016-135 in December 2016, which formalized EMWD's intention to be the GSA for the West San Jacinto GSA Area and, EMWD's Board of Directors became the exclusive GSA for the western portion of the San Jacinto Groundwater Basin on April 24, 2017.

EMWD, as the GSA, initiated the development of the San Jacinto Groundwater Basin GSP in February 2019, and adopted and submitted the GSP to the DWR in November 2021. The purpose of the GSP is to define the conditions under which the groundwater resources of the West San Jacinto GSA Plan Area, which support agricultural, domestic, municipal and industrial, and environmental uses, will be managed sustainably in the future. The adoption of the GSP represents the commitment of the West San Jacinto GSA to maintain long-term, sustainable use of groundwater resources within the West San Jacinto GSA Plan Area, as required by SGMA. Over the next 20 years, data will continue to be gathered, analyzed, and used to refine the estimated sustainable yield and understanding of the sources of and influences on degraded water quality. As the understanding of the West San Jacinto GSA Plan Area improves, the findings of this GSP will be evaluated and updated as necessary. The GSP documents a viable approach, determined by the GSA in collaboration with stakeholders and informed by the best available information, to maintaining the long-term sustainability of the groundwater resources within the West San Jacinto GSA Plan Area. The first San Jacinto Groundwater Basin Groundwater Sustainability Plan Annual Report was submitted to DWR and published in March 2022 and will continue to be completed annually.

iv. Groundwater Recharge

EMWD has undertaken groundwater recharge operations with imported surplus Metropolitan water within the Hemet/San Jacinto area since 1990, initially through the use of temporary facilities constructed under various pilot programs. Long term facilities for recharge were placed in operation under the IRRP, which plays an integral role in both the HSJ Management Plan and the Soboba Settlement Agreement. Facilities for the first phase of the IRRP include approximately 35 acres of basins/ponds for recharge, three extraction wells, three monitoring wells, modifications to two existing pump stations and pipelines within and adjacent to the San Jacinto River. EMWD is currently expanding its groundwater recharge and banking capabilities

through Phase 1 of the Enhanced Recharge and Recovery Program (ERRP), the Santa Ana Conservation and Conjunctive Use Program (SARCCUP). Planned future phases of the ERRP will further expand the groundwater recharge and banking capabilities.

EMWD also contributes to the replenishment of the basin by providing recycled water to customers for use in lieu of private groundwater production. This program can deliver up to 8,540 AF annually to local agricultural users and the costs are borne jointly by EMWD, LHMWD, and the Cities of Hemet and San Jacinto. Agreements that set limits on groundwater production and support portions of operational and maintenance costs have been in place since 2008.

v. Groundwater Pumping Rights Water Code §10910 (f)

The Hemet/San Jacinto area forms the bulk of the eastern portion of EMWD's service area and is adjudicated through the Hemet-San Jacinto Watermaster and managed under the HSJ Management Plan. The groundwater native to this region is generally of high quality and is a major source of municipal as well as private production. EMWD's long term adjusted base groundwater production right in this area is 7,303 AF. Any pumping above this amount is subject to replenishment fees or must be offset by groundwater recharge. EMWD also receives the right to pump a portion of water recharged under the Soboba Settlement Agreement that is unused by the Soboba Tribe. Both EMWD's adjusted base production right and unused recharge water right can be carried over into future years. At the end of 2022, EMWD's balance of carry over credits exceeded 28,000 AF.

EMWD also operates potable wells in the Moreno Valley/North Perris area as well as brackish wells that feed EMWD's desalination facilities. These wells are located outside of the Hemet/San Jacinto area and will be managed by EMWD as the GSA under the San Jacinto Groundwater Basin GSP. Pumping in the GSA area is currently not subject to any restrictions.

(1) Past Groundwater Extraction

Water Code §10910 (f)(3)

Historic groundwater extractions by EMWD are documented in Table 2. The majority of EMWD's groundwater is extracted from the Hemet/San Jacinto area, with the remainder coming from the area covered by the WSJ Management Plan. The general location of wells and desalination facilities are shown in Figure 1.

(2) Projected Groundwater Extraction

Water Code §10910 (f)(4)

EMWD's projected groundwater supplies are shown in Table 4. Groundwater produced from the Hemet/San Jacinto area is adjudicated by the Hemet-San Jacinto Watermaster. For 2023, EMWD has an adjusted base production right of 7,303 AF, in addition to its balance of carry over credits. Any pumping above the adjusted base production right and carry over credits will be subject to replenishment fees or offset by groundwater recharge. Groundwater production outside the Hemet/San Jacinto area is not restricted and includes EMWD's wells located in Menifee and North Perris, as well as the wells feeding EMWD's desalter system. The general locations of the facilities shown in Figure 1 are anticipated to remain consistent for the foreseeable future.

vi. Analysis of the Sufficiency of Groundwater Water Code 10910 (f)(5)

Protecting the groundwater supply available to EMWD is an important part of EMWD's planning efforts. EMWD is actively working with other agencies and groups to ensure that groundwater will continue to serve as a reliable water resource in the future. This effort includes the replacement of groundwater extracted beyond a given basin's safe yield.

EMWD extracts groundwater within its service area under the HSJ Management Plan and the San Jacinto Groundwater Basin GSP. Under the HSJ Management Plan, imported water will be recharged in the Hemet/San Jacinto area to support groundwater extractions, while pumping in the GSA area, where groundwater levels have been rising, is planned to increase in the future as EMWD constructs new wells as part of the Perris North Groundwater Contamination Prevention and Remediation Program.

B. Surface Diversion Rights

License Number 10667

EMWD holds a right to divert up to 5,760 AF of San Jacinto River flows for recharge and subsequent use. The diversion right applies annually from November 1 through June 30 each year. EMWD's diversion and recharge of San Jacinto River flows take place within the Canyon GMZ at EMWD's Grant Avenue Ponds located in the Valle Vista area. Diversions are recharged into the groundwater basin and are not sold or used directly. Flows in the San Jacinto River are ephemeral and in any given year, flows may not be sufficient for any amount of diversion at all. Additional information about surface water diversions can be found in the Annual Report of the HSJ Management Plan.

C. Recycled Water

Water Code §10910 (d)(1)

Recycled water is used extensively in EMWD's service area in place of potable water. This offset to municipal demand comes from recycled water use to irrigate landscape and for industrial purposes. The majority of EMWD's agricultural customers also use recycled water, in some cases, in lieu of groundwater production.

EMWD's recycled water supply will expand as the population within EMWD's service area continues to grow. EMWD generally uses all its recycled water and is limited only by the amount available to serve during peak demands and by system losses. EMWD stores recycled water during low demand periods and does not typically discharge recycled water. EMWD anticipates that this will continue even as the recycled water supply grows via programs to retrofit additional landscape customers currently using potable water and future recharge for indirect potable reuse.

D. Water Use Efficiency Measures

Water Code §10631 (e)

The Water Conservation Act of 2009 (SBx7-7) set a requirement for water agencies to reduce their per capita water use by the year 2020. The overall goal is to reach a statewide reduction of per capita urban water use of 20 percent by December 31, 2020, with an intermediate 10 percent reduction by December 31, 2015. Demand reduction can be achieved through both conservation

and the use of recycled water as a potable demand offset. EMWD's retail customers used approximately 125 gallons per capita per day (gpcd) in 2020, which exceeds the per capita use water use efficiency target set under SBx7-7 of 176 gpcd.

In 2018, California passed Assembly Bill 1668 (AB 1668) and Senate Bill 606 (SB 606), collectively known as the Making Conservation a California Way of Life legislation. AB 1668 and SB 606 will require additional increases in water use efficiency beyond the targets set under SBx7-7. Rulemaking for AB 1668 and SB 606 remains in progress and EMWD's new target has not been set.

EMWD's conservation effort primarily utilizes three methodologies:

- Budget Based Tiered Rates EMWD implemented a tiered rate billing structure for its residential and landscape customers in April of 2009. Customers are provided with an allocation for reasonable water use and are required to pay a higher rate for water use over their allocated limit. A study by the University of California, Riverside showed that budget-based rates reduced demand from existing residential customers by 15 percent;
- 2. Water Use Efficiency Requirements for New Development These requirements focus on the installation of lower water use landscape and interior fixtures. Water use efficiency is mandated statewide through existing ordinances, plumbing codes, and legislation. To enforce water use efficiency, EMWD has lowered the water budget allocations for new developments. Any residential or dedicated landscape account installed after January 1, 2011, has an outdoor budget allocation based on only 70 percent of evapotranspiration (ET), and non-functional turf is prohibited. Similar accounts installed after April 2015, have an outdoor budget allocation that is reduced to 50 percent of ET. As of January 2018, accounts with an outdoor budget allocation of 100 percent of ET have been reduced to 80 percent of ET; and
- 3. Active Conservation Program EMWD implements a variety of water use efficiency programs that encourage the replacement of inefficient devices and includes monetary rebates, distribution, and direct installation programs.

In addition to these outlined conservation efforts, EMWD continues to expand its recycled water system to offset potable demand.

E. Local Resources Documentation

i. Written Contracts or Other Proof Water Code §10910 (d)(2)(A)

The following is a list of documents related to EMWD's local water supply:

- EMWD 2020 Urban Water Management Plan (June 2021): EMWD's 2020 Urban Water Management Plan is attached as Appendix A. This plan supplies additional information on EMWD, its service area, water management, and supply capabilities.
- Hemet/San Jacinto Groundwater Management Area 2022 Annual Report (May 2023):
 This annual report contains detailed information on the history and progress of groundwater management and the groundwater monitoring program in the Hemet/San Jacinto area

- Hemet/San Jacinto Groundwater Management Area Water Management Plan: This
 plan was developed by stakeholders in the Hemet/San Jacinto area to provide a
 foundation to guide and support responsible water management into the future. The
 plan was finalized in 2007.
- San Jacinto Groundwater Basin Groundwater Sustainability Plan 2022 Annual Report (March 2022): This annual report contains detailed information on the history and progress of groundwater management and the groundwater monitoring program in the West San Jacinto area (including Perris and Menifee) for water years 2019 through 2021. This report can be found on SGMA's website (sgma.water.ca.gov).
- Groundwater Sustainability Plan for the San Jacinto Groundwater Basin (September 2021): As the GSA, EMWD developed the GSP to define the conditions under which the groundwater resources of the West San Jacinto GSA Plan Area will be managed sustainably in the future. This plan can be found on EMWD's website (www.emwd.org).

With respect to EMWD's ownership and use of reclaimed/recycled water, the California Water Code, §1210 states:

The owner of a wastewater treatment plant operated for the purpose of treating wastes from a sanitary sewer system shall hold the exclusive right to the treated wastewater as against anyone who has supplied the water discharged into the wastewater collection and treatment system, including a person using water under a water service contract, unless otherwise provided by agreement.

With respect to the Water Use Efficiency Ordinance that will result in additional supplies through conservation:

- The County of Riverside Board of Supervisors approved an update to Ordinance Number 859 on October 20, 2009, requiring water efficient landscaping in any new development requiring a permit; and
- EMWD's Administrative Code requires water efficient landscaping in new developments and water efficiency by all customers. Efficiency is enforced through allocation based tiered rates. EMWD's Administrative Code can be found on EMWD's website (www.emwd.org).

ii. EMWD's Capital Improvement Plan Water Code §10910 (d)(2)(B)

EMWD maintains and periodically updates a comprehensive Water Facilities Master Plan (WFMP). This working plan defines water supplies, transmission mains, and storage facilities required for the accommodation of projected growth within EMWD. On a yearly basis, a five-year Capital Improvement Plan (CIP) is prepared, which is based on a further refinement of the WFMP. The CIP outlines specific projects and their funding source. Each project is also submitted individually to the EMWD Board of Directors for authorization and approval. This allows EMWD to accurately match facility needs with development trends. Financing information for the desalter plant construction, expansion of the regional water reclamation facilities, and well replacement can also be found in the CIP.

*iii. Federal, State, and Local Permits Needed for Construction*Water Code §10910 (d)(2)(c)

As part of EMWD's CIP, representatives from the Engineering, Water Resources and Facilities Planning, and Environmental and Regulatory Compliance departments discuss each project and the steps needed to comply with regulatory requirements. EMWD works with various government agencies, including the United States Department of Fish and Wildlife, the United States Army Corps of Engineers, the California Department of Public Health, the California Division of Drinking Water, the California State Water Resources Board, the California Air Quality Management District, and the California Department of Fish and Game to obtain permits when necessary. The Engineering department procures additional construction permits on a case-bycase basis. EMWD has already, or is in the process of, obtaining Environmental Impact Reports or other environmental documents necessary for desalter construction, expansion of regional water reclamation facilities, and well replacements. Any necessary permits secured by EMWD are kept on file at EMWD's headquarters facility.

iv. Regulatory Approvals Water Code §10910 (d)(2)(D)

The California Division of Drinking Water (DDW) has issued a system-wide permit for EMWD's water supply system. EMWD's Environmental and Regulatory Compliance department conforms to specific regulations and obtains any additional necessary approvals. As new facilities are constructed by EMWD, they are subject to inspection and testing by regulatory agencies and the DPH permit is amended.

Section III: Demands

III.1 Demand Projections

Water Code §10910 (c)(2)

EMWD's primary retail customers for potable and raw water can be divided into residential, commercial, industrial, institutional, landscape, and agricultural sectors. The residential sector is EMWD's largest customer segment; however, each sector plays a role in the growth and development of EMWD's service area. The historic and projected customer water use by the various potable/raw retail customer types are shown in Table 6.

TABLE 6: RETAIL POTABLE/RAW WATER USE BY CUSTOMER TYPE

	Actual Water Use - AFY			1	Projected Water Use - AFY				
Use Type	2005	2010	2015	2020	2025	2030	2035	2040	2045
Single Family	62,300	54,000	45,700	52,200	66,900	71,700	76,700	80,500	84,000
Multi-Family	5,500	6,100	5,800	6,500	8,500	9,100	9,700	10,200	10,600
Commercial	3,900	4,200	4,600	4,300	6,100	6,500	7,000	7,300	7,600
Industrial	400	400	300	600	600	600	700	700	700
Institutional	2,900	2,300	2,000	1,600	2,700	2,900	3,100	3,200	3,400
Landscape	7,500	8,900	7,700	8,200	8,400	7,600	6,800	6,200	5,500
Agricultural	2,500	2,300	2,800	1,600	2,000	2,000	2,000	2,000	2,000
Total	85,000	78,200	68,900	75,000	95,200	100,400	106,000	110,100	113,800

EMWD also provides wholesale water service to a number of sub-agencies, serves recycled water, and imports water for recharge purposes. These demands are shown in Table 7.

TABLE 7: WHOLESALE DELIVERIES TO OTHER AGENCIES

	Actual Deliveries - AFY			,	Projected Deliveries - AFY				
Supplier	2005	2010	2015	2020	2025	2030	2035	2040	2045
City of Hemet	100	0	0	0	0	0	0	0	0
City of Perris	1,900	1,700	1,500	1,685	1,800	1,900	2,100	2,200	2,300
City of San Jacinto	0	0	0	0	0	0	0	0	0
LHMWD	100	1,300	4,300	986	5,100	5,500	5,900	6,300	6,700
NWC	800	600	200	409	500	1,000	1,100	1,200	1,200
RCWD	26,300	21,900	15,000	25,028	42,300	35,200	36,200	37,500	38,800
WMWD (Murrieta)	100	1,600	700	1,809	1,000	1,300	1,600	2,000	2,300
Recharge (Soboba)	0	0	0	6,467	7,500	7,500	7,500	7,500	7,500
Total	29,300	27,100	21,700	36,384	58,200	52,400	54,400	56,700	58,800

- 1. The Cities of Hemet and San Jacinto plan to meet 100% of demands using local groundwater supplies, however, EMWD can deliver water to the cities during high demand periods or when city wells are undergoing maintenance.
- 2. Under the Soboba Settlement Agreement, Metropolitan must provide an annual average of 7,500 AFY of water to be recharged in the Hemet/San Jacinto Management Plan Area by EMWD, LHMWD, and the Cities of Hemet and San Jacinto to fulfill the Soboba Tribe's water right. Actual deliveries will vary from year to year, and Metropolitan has the option to pre-deliver water. Recharge water unused by the Soboba Tribe is proportioned between the four agencies.

Other water demands including recycled water use, recharge that occurred prior to or outside the scope of the Soboba Settlement Agreement, system losses, non-revenue water deliveries, and other, miscellaneous water usage are shown in Table 8.

TABLE 8: OTHER AND NON-POTABLE WATER USAGE

	Actual Water Use - AFY			Projected Water Use - AFY					
Use Type	2005	2010	2015	2020	2025	2030	2035	2040	2045
Recycled ^{(1),(2)}	32,600	28,200	46,100	40,900	44,000	50,100	47,800	53,100	57,400
Recharge ⁽³⁾	7,000	0	0	0	0	0	0	0	0
Other / Losses ⁽⁴⁾	7,700	8,400	9,100	9,800	7,400	7,900	8,400	8,800	9,200
Total	47,300	36,600	55,200	50,700	51,400	58,000	56,200	61,900	66,600

- 1. Recycled water projections include recycled water that is delivered to sub-agencies but excludes the volume of recycled water that is planned to be recharged as part of EMWD's Purified Water Replenishment (indirect potable reuse) project to avoid double counting.
- 2. Recycled water supply may be supplemented by brackish groundwater or raw water during high demand months.
- 3. The volume of recharge water excludes water that is imported under the Soboba Settlement Agreement (shown in prior table).
- 4. Other/losses category includes unbilled, authorized consumption use as well as real and apparent losses in the potable system.

Total demands on EMWD's water system are summarized in Table 9.

TABLE 9: SUMMARY OF TOTAL SYSTEM WATER DEMANDS

	Actual Water Use - AFY				Projected Water Use - AFY				
Category	2005	2010	2015	2020	2025	2030	2035	2040	2045
Retail	85,000	78,200	68,900	75,000	95,200	100,400	106,000	110,100	113,800
Wholesale	29,300	27,100	21,700	36,384	58,200	52,400	54,400	56,700	58,800
Other	47,300	36,600	55,200	50,700	51,400	58,000	56,200	61,900	66,600
Total	161,600	141,900	145,800	162,084	204,800	210,800	216,600	228,700	239,200

III.2 Project Demands

The Project proposes construction of approximately 15,000 very-high density multi-family residential dwelling units with a proposed density of 25 to 50 dwelling units per acre along with 40 acres of schools, 40 acres of parks, a 40-acre multi-purpose lake, and a 25-acre mixed-use town center including a 300-unit hotel. The Project will be located south of Brodiaea Avenue and north of Iris Avenue between Lasselle Street and Oliver Street on approximately 650 acres.

In the 2020 UWMP, the demand projections for the parcels covering the project site were estimated based on commercial office, medium density residential, and open space conservation land uses, with a total demand of 1,592 AFY.

TABLE 10: 2020 UWMP LAND USE DEMAND ESTIMATE

Land Use Category	Average Day Demand (gpd)	Annual Demand (AFY)	
Medium Density Residential	16,828	19	
Commercial Office	1,403,196	1,573	
Total	1,420,024	1,592	

Based on the land use information provided by the developer and the lead agency, the total water demand for this project is estimated to be up to 3,519 AFY. The developer may be able to offset approximately 412 AFY of the project's required potable supply through the use of recycled water and a private on-site well, which would potentially reduce the annual demand to approximately 3,107 AFY. At this time, the potential supply offsets proposed by the developer are speculative, and to be conservative, the WSA will evaluate the full demand of 3,519 AFY.

The total water demand projected for this project represents an increase in the limits of estimated demand considered in the 2020 UWMP. However, EMWD has planned for this possibility by including a planning buffer when projecting the demands considered in the 2020 UWMP. After accounting for the cumulative demands from the Project and other developments in EMWD's service area (including other WSAs), over 10,000 AFY of buffer remains. This buffer is expected to grow in the future due to factors such as ongoing water use efficiency legislation and potable water offsets from recycled water conversions. Accordingly, demands from new developments in EMWD's service area, including the Project, ultimately fall within the levels of demand considered in the 2020 UWMP.

TABLE 11: PROJECT SPECIFIC DEMAND ESTIMATE

Land Use Category	Average Day Demand (gpd)	Annual Demand (AFY)	
Very-High Density Residential (1)	2,625,000	2,942	
Hotel	37,500	42	
Commercial Retail	55,000	62	
Public Facilities	88,000	99	
Open Space Recreation	154,000	173	
Multi-Purpose Lake	180,000	202	
Total ⁽²⁾	3,139,500	3,519	
Planned Supply Offsets ⁽³⁾			
Recycled Water	187,000	210	
Private Well	180,000	202	
Alternative Total (3)	2,772,500	3,107	

- 1. Proposed density 25-50 dwelling units per acre
- 2. Totals may not agree due to rounding.
- 3. Planned supply offsets are speculative, and to be conservative, the WSA is evaluating the demands as if the project will be entirely supplied by EMWD's potable system. Offsets are estimates and could be greater or less than shown in table.

All new development is required to install water efficient devices and landscaping. The use of turf for non-functional purposes is prohibited. For reference, a document titled "Water Efficient Guidelines for New Development" is available on EMWD's website (www.emwd.org) to help increase water use efficiency for this Project.

III.3 Database of Proposed Projects

Water Code §10910 (c)(3)

To develop the projections used in this WSA, EMWD uses a development tracking database that assesses future water demands for specific projects. EMWD uses this database to help plan for future water supply and infrastructure needs by monitoring new projects through various stages of development. Subject to the Board of Director's approval of this WSA, information associated with this Project will be updated in the supply and demand projections EMWD uses for planning. Changes in density and land use are also tracked in this database for planning purposes. The developer is required to notify EMWD if any changes to project density or land use occur.

Section IV: Evaluation of Supply and Demand

Water Code §10910 (c)(2)

IV.1 Supply and Demand Evaluation under Historic Conditions

EMWD's 2020 UWMP includes an evaluation of EMWD's water supply reliability under a range of potential hydrologic conditions. The results for normal year conditions are shown in Table 12 and Table 13 for EMWD's retail and wholesale service respectively. The single dry year evaluation is documented in Table 14 and

Table 15, and the results of the multiple dry year evaluation are shown in Table 16 and Table 17. The supply totals shown in the table reflect EMWD's planned production and not EMWD's supply

capacity. Under drought conditions, EMWD may increase local supply production, pump from stored water supplies, or purchase additional imported water from Metropolitan if necessary. More details on this analysis can be found in Chapter 7 of the 2020 UWMP.

A. Normal Year Supply and Demand Comparisons

TABLE 12: RETAIL SUPPLY AND DEMAND COMPARISON, NORMAL YEAR (AFY)

	2025	2030	2035	2040	2045
Supply Totals	145,930	157,320	168,900	178,700	187,100
Demand Totals	145,930	157,320	168,900	178,700	187,100
Difference	0	0	0	0	0

TABLE 13: WHOLESALE SUPPLY AND DEMAND COMPARISON, NORMAL YEAR (AFY)

	2025	2030	2035	2040	2045
Supply Totals	62,970	57,580	60,000	62,300	64,400
Demand Totals	62,970	57,580	60,000	62,300	64,400
Difference	0	0	0	0	0

B. Single Dry Year Supply and Demand Comparisons

TABLE 14: RETAIL SUPPLY AND DEMAND COMPARISON, SINGLE DRY YEAR (AFY)

	2025	2030	2035	2040	2045
Supply Totals	151,130	162,820	174,700	184,700	193,300
Demand Totals	151,130	162,820	174,700	184,700	193,300
Difference	0	0	0	0	0

TABLE 15: WHOLESALE SUPPLY AND DEMAND COMPARISON, SINGLE DRY YEAR (AFY)

	2025	2030	2035	2040	2045
Supply Totals	64,770	59,080	61,600	63,600	65,900
Demand Totals	64,770	59,080	61,600	63,600	65,900
Difference	0	0	0	0	0

C. Multiple Dry Years Supply and Demand Comparison

TABLE 16: RETAIL SUPPLY AND DEMAND COMPARISON, MULTIPLE DRY YEARS (AFY)

		2025	2030	2035	2040	2045
	Supply Totals	151,130	162,820	174,700	184,700	193,300
First Year	Demand Totals	151,130	162,820	174,700	184,700	193,300
	Difference	0	0	0	0	0
Socond	Supply Totals	132,700	143,300	153,700	162,500	170,300
Second Year	Demand Totals	132,700	143,300	153,700	162,500	170,300
Teal	Difference	0	0	0	0	0
	Supply Totals	134,900	145,500	155,500	164,100	171,900
Third Year	Demand Totals	134,900	145,500	155,500	164,100	171,900
	Difference	0	0	0	0	0
	Supply Totals	137,100	147,600	157,400	165,700	173,500
Fourth Year	Demand Totals	137,100	147,600	157,400	165,700	173,500
	Difference	0	0	0	0	0
	Supply Totals	140,200	150,800	160,000	168,000	175,800
Fifth Year	Demand Totals	140,200	150,800	160,000	168,000	175,800
	Difference	0	0	0	0	0

TABLE 17: WHOLESALE SUPPLY AND DEMAND COMPARISON, MULTIPLE DRY YEARS (AFY)

		2025	2030	2035	2040	2045
	Supply Totals	64,770	59,080	61,600	63,600	65,900
First Year	Demand Totals	64,770	59,080	61,600	63,600	65,900
	Difference	0	0	0	0	0
Cocond	Supply Totals	63,200	59,100	61,400	63,400	65,600
Second	Demand Totals	63,200	59,100	61,400	63,400	65,600
Year	Difference	0	0	0	0	0
	Supply Totals	62,100	59,600	61,800	63,900	66,000
Third Year	Demand Totals	62,100	59,600	61,800	63,900	66,000
	Difference	0	0	0	0	0
	Supply Totals	61,000	60,100	62,200	64,300	66,400
Fourth Year	Demand Totals	61,000	60,100	62,200	64,300	66,400
	Difference	0	0	0	0	0
	Supply Totals	59,800	60,600	62,600	64,700	66,900
Fifth Year	Demand Totals	59,800	60,600	62,600	64,700	66,900
	Difference	0	0	0	0	0

EMWD's 2020 UWMP discusses the supply reliability for EMWD during dry years. EMWD expects its local supplies to remain highly reliable and resilient, even under severe hydrologic conditions.

Similarly, Metropolitan's UWMP shows that Metropolitan would have the ability to meet all its member agencies' project supplemental demand through 2045, even under a repeat of historic drought scenarios.

IV.2 Contingency Planning

EMWD maintains a Water Shortage Contingency Plan (WSCP) that aims to reduce demand during water shortage using significant penalties for wasteful water use. EMWD's WSCP details demand reductions for several stages of shortage through a 50 percent or greater reduction. Additional information about contingency planning is included in Chapter 8 of EMWD's 2020 UWMP.

The WSCP was last updated on June 15, 2022, and is located in Title 5, Article 10 of the EMWD Administrative Code, which is available on EMWD's website (www.emwd.org).

Section V: Water Supply Assessment

V.1 Potable Water

From a facilities perspective, the Project may be conditioned to construct off-site and on-site water facilities needed to distribute water throughout the project area. Prior to construction, the developer should contact EMWD staff to establish development design conditions and determine if any revisions are required to the master plan. Figure 2 shows existing water facilities in relation to the Project.

EMWD plans to supply new water demands in its service area, including the Project, through a combination of additional imported water purchases from Metropolitan and the ongoing development of EMWD's local supply resources.

V.2 Recycled Water

EMWD policy recognizes recycled water as the preferred source of supply for all non-potable water demands, including irrigation of recreation areas, greenbelts, open space common areas, commercial landscaping, and supply for aesthetic impoundment or other water features.

According to EMWD's policies, the Project may be conditioned to construct a recycled water system separately from the potable water system. The system will need to be constructed to recycled water standards. The Project may also be conditioned to construct off-site recycled water facilities. EMWD will make a final determination on requirements for recycled water use and facilities during the development design conditions phase of the Project.

V.3 Duration of Approval

This assessment will be reviewed every three years until the Project begins construction. The Project applicant shall notify EMWD when construction has begun. The review will ensure that the information included in this assessment remains accurate and no significant changes to either the Project or EMWD's water supply have occurred. Furthermore, if the environmental document for the Project is not certified within three years after the adoption of this WSA, the WSA may be updated at such time if there are changed circumstances warranting updated analysis. If the environmental document is certified within three years of the adoption of the WSA, then the applicant shall provide updates to EMWD every three years on the status of the Project until construction commences; however, in such an instance, the WSA shall not be

amended or invalidated by EMWD. If neither the Project applicant nor the lead agency contacts EMWD within three years of approval of this WSA, it is assumed that the Project no longer requires the estimated water demand calculated, and the demand for this project will not be considered in assessments for future projects. The assessment provided by this document will then become invalid.

V.4 Conclusion

EMWD relies on Metropolitan and local resources to meet the needs of its growing population. Metropolitan demonstrated in the 2020 Metropolitan UWMP that with the addition of all water supplies, existing and planned, Metropolitan has the ability to meet all of its member agencies projected supplemental demand through 2045, even under a repeat of historic multiple-year drought scenarios.

Based on present information and the assurance that Metropolitan is engaged in identifying solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies, EMWD has determined that it will be able to provide adequate water supplies to meet the potable water demand for this project as part of its existing and future demands.

In the event that the lead agency determines an adequate water supply exists for the Project, the developer of this project is required to meet with EMWD Development Services staff to establish development design conditions. The development design conditions will detail water, wastewater, and recycled water requirements to serve the Project. An agreement may be developed prior to construction if additional funding is determined to be required to reduce existing customer demand on imported supplies through the expansion of local resources or implementation of additional conservation programs. If required, this reduction of existing customer demand on imported water supplies would free up allocated imported water to be used to serve this Project during multiple dry year conditions. The amount of funding will be determined by EMWD (if required) and may take the form of a new component of connection fees or a separate charge.

If there is a change in the circumstances detailed in this assessment, EMWD will address the changes in the development design conditions for the Project. Modifications at the development design conditions stage could reduce the amount of water available to serve this Project.

Section VI: Conditions of Approval

This assessment is not a commitment to serve the project, but a review of EMWD supplies based on present information available. This assessment is conditioned on Metropolitan's ability to continue to supply imported water to meet EMWD's requirements, including the requirements for the evaluated Project area. This project is subject to any special or additional requirements imposed by Metropolitan or EMWD on such deliveries, including increased pricing or a different pricing structure.

All new development is required to install water efficient devices and landscaping. The use of turf for non-functional purposes is prohibited. A document titled "Water Efficient Guidelines for

New Development" is available on EMWD's website to help increase water efficiency for this project.

The lead agency for the Project is responsible for evaluating the adequacy of the water supply assessment and making the ultimate decision of the sufficiency of the water supply. The developer for the Project is responsible for keeping EMWD informed about progress in the planning and development of the Project. The Project applicant will contact EMWD with Project status information and updates every three years until the Project begins construction. This will ensure that the information included in this assessment remains accurate and no significant changes to either the project or EMWD's water supply have occurred. Furthermore, if the environmental document for the Project is not certified within three years after the adoption of this WSA, the WSA may be updated at such time if there are changed circumstances warranting updated analysis. If the environmental document is certified within three years of the adoption of the WSA, then the applicant shall provide updates to EMWD every three years on the status of the Project until construction commences; however, in such instance, the WSA shall not be amended or invalidated by EMWD. If neither the Project applicant nor the lead agency contacts EMWD within three years of approval of this WSA, it is assumed that the Project no longer requires the estimated water demand calculated, and the demand for this Project will not be considered in assessments for future projects. The assessment provided by this document will then become invalid.

If the lead agency determines adequate water supply exists for this project, to the greatest extent possible, recycled water shall be used on the Project. Details about the feasibility of recycled water use shall be included in the development design conditions for the Project.

FIGURE 1: EMWD SUPPLY SOURCES

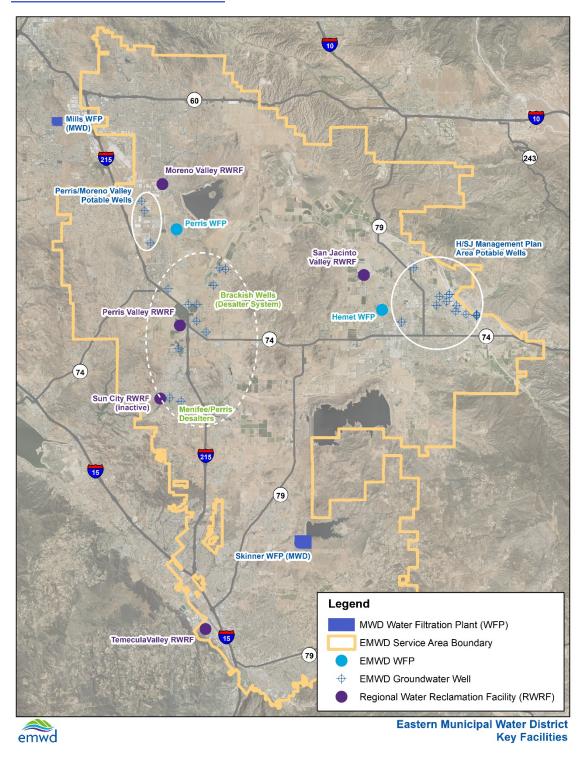
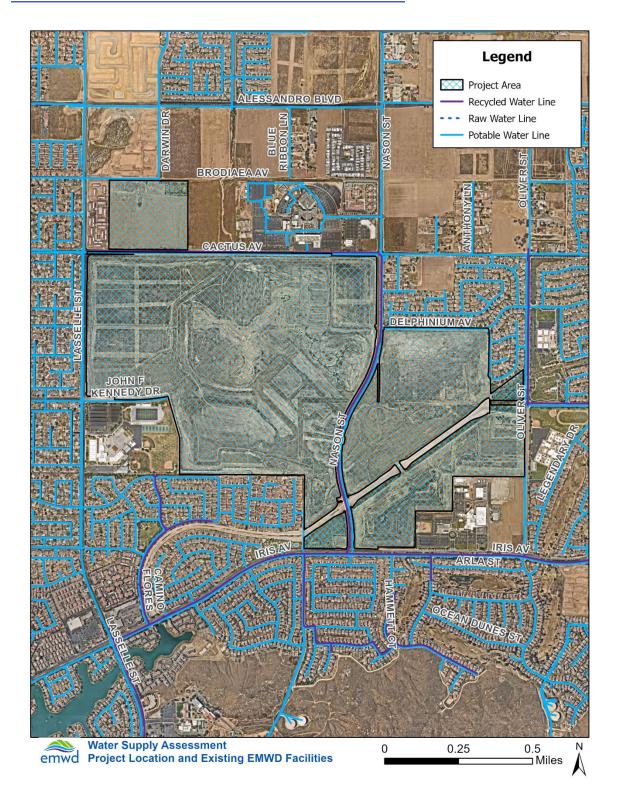


FIGURE 2: PROJECT LOCATION AND EXISTING EMWD WATER LINES



Water Supply Assessment Report

Supplemental Information

Appendix A

EMWD – 2020 Urban Water Management Plan

Appendix B

Metropolitan – 2020 Urban Water Management Plan

Appendix C

EMWD CIP Budget