

**WATER SUPPLY ASSESSMENT FOR THE
GOODMAN INDUSTRIAL PARK FONTANA III PROJECT
CITY OF FONTANA, CALIFORNIA**

**PREPARED
FOR**

**FONTANA WATER COMPANY
JULY 2019**

**PREPARED
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ABBREVIATIONS AND ACRONYMS

AF	Acre-Feet
AFY	Acre-Feet per Year
CEQA	California Environmental Quality Act
cfs	Cubic feet per second
CPUC	California Public Utilities Commission
CVWD	Cucamonga Valley Water District
DWR	Department of Water Resources
Fontana Union	Fontana Union Water Company
FWC	FWC
gpm	Gallons per minute
IEUA	Inland Empire Utilities Agency
MGD	Million Gallons per Day
MWD	Metropolitan Water District of Southern California
PEIR	Programmatic Environmental Impact Report
SBVMWD	San Bernardino Valley Municipal Water District
sf	Square Feet
Project	Goodman Industrial Park Fontana III Project
SWP	State Water Project
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
WSA	Water Supply Assessment

1.0 EXECUTIVE SUMMARY

Fontana Water Company (FWC) has prepared this Water Supply Assessment (WSA) for the proposed industrial development known as the Goodman Industrial Park Fontana III Project (the “Project”). The water demands for the Project are included in this WSA.

The present and future water supplies available to FWC to provide water service to the Project are groundwater pumped from the Chino Basin, Lytle Basin, Rialto Basin, and No-Man’s Land Basin, surface water diversions from Lytle Creek, imported State Water Project water from Inland Empire Utilities Agency (IEUA) and San Bernardino Valley Municipal Water District (SBVMWD), and recycled water.

The Chino Basin has enhanced reliability during drought and is FWC’s most reliable source of water supply. The Chino Basin Watermaster and its technical staff ensure long-term reliability of water supplies from the Chino Basin. The Watermaster, under the direct supervision of the San Bernardino County Superior Court, manages basin water supplies, arranges for local and supplemental groundwater recharge and implements and administers the Chino Basin physical solution as prescribed in the governing Superior Court groundwater pumping rights adjudication (the “Chino Basin Judgment”).

The Chino Basin Watermaster’s groundwater management responsibilities are closely coordinated with IEUA water management goals and implementation of strategies. IEUA’s role as a regional water wholesaler includes delivery of supplemental, imported, untreated State Water Project water directly to water purveyors like FWC, delivery of water from the Metropolitan Water District of Southern California (MWD) to the Chino Basin Watermaster for groundwater recharge, exchange, groundwater banking, and conjunctive use programs, as well as delivery of recycled water. IEUA has also analyzed future water demands and water supplies within its service area, which includes most of FWC’s service area, including the Project, and concluded that sufficient water supplies will be available for the next twenty years through 2040, including during single and multiple dry years.

This WSA analyzes and evaluates FWC’s historical water supplies, water rights, current Urban Water Management Plans (UWMPs) developed by FWC and IEUA, SBVMWD’s Optimum Basin Management Plan, and the historical and future availability of State Water

Project (SWP) water. Based on that analysis and evaluation, this WSA shows clearly that FWC's available water supplies will be sufficient to meet all of the water demands of the entire Project for the next twenty years through 2040, including during single and multiple dry years.

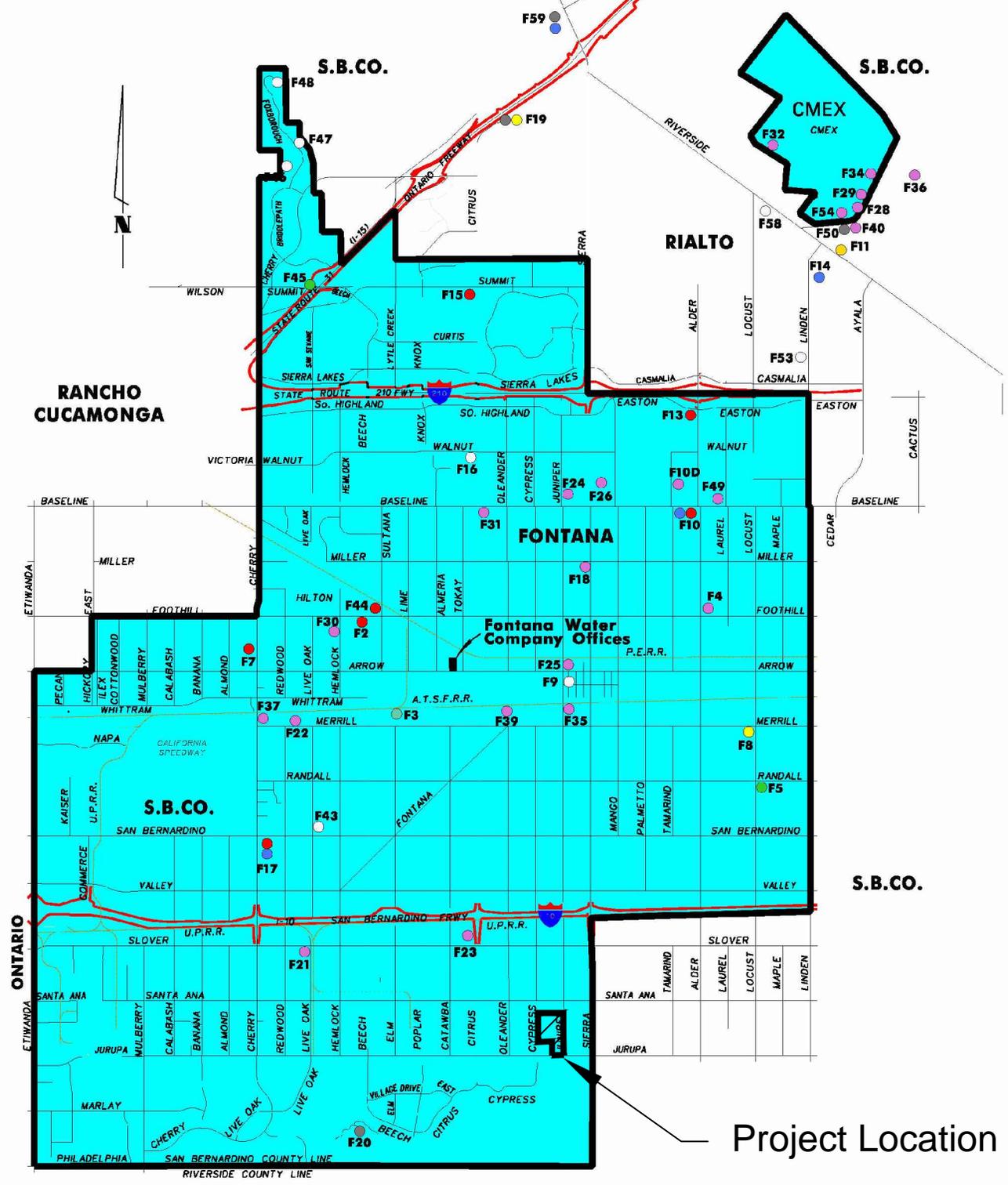
2.0 INTRODUCTION

PROJECT DESCRIPTION

The proposed Project is located east of Cypress Avenue, south of Santa Ana Avenue, north of Jurupa Avenue, and west of Juniper Avenue. The proposed Project will include a total of approximately 1,118,460 square feet (sf) of office and warehouse floor space with parking, pavement, and perimeter landscaping on a Project site of approximately 47.50 acres. Based on a Project site map prepared by HPA Architecture (See Appendix A), the Project is located in the southern portion of the City of Fontana within FWC's certificated service area as authorized by the California Public Utilities Commission (CPUC) (Figure 1).

LEGEND

- - WELL
- - WELL & BOOSTERS
- - BOOSTERS
- - WELL, BOOSTERS & RESERVOIR
- - TREATMENT FACILITY
- - RESERVOIR
- - CLA VALVE
- - BOOSTERS & RESERVOIR
- - AFTERBAY
- - INTAKES



Project Location

FONTANA WATER COMPANY
SYSTEM NO. 3610041



PROJECT LOCATION AND FONTANA WATER COMPANY SERVICE AREA

PURPOSE AND SCOPE OF ASSESSMENT

The Project is located within FWC’s present CPUC certificated service area, as shown in Figure 1. FWC is ready, willing, and able to provide all necessary water utility service to meet all of the water supply needs of the entire Project.

The purpose of this WSA is to evaluate and confirm FWC’s ability to provide all public utility water service to the Project. The reliability of future water supplies available to FWC is based on FWC’s longstanding water rights and access to local renewable groundwater and surface water supplies as listed in Table 1 (Summary of FWC Water Rights). Also, it is based on the Chino Basin Watermaster’s and IEUA’s water management goals and implementation strategies, such as the Optimum Basin Management Plan, supplemental imported water distribution programs, and the use of recycled water. This WSA evaluates all of FWC’s available water supply sources and projected water demands for the entire Project area.

TABLE 1 SUMMARY OF FWC WATER RIGHTS

Sources of Supply	Water Right	Description
Lytle Creek (Surface Water)	Lytle Judgments, (1897 McKinley Decree and January 28, 1924 Judgment)	<ul style="list-style-type: none"> Entitled to divert up to 3,480.78 miner’s inches (~50,400 AFY) from Lytle Creek Region, including up to 2,500 miner’s inches (~36,200 AFY) of combined surface and groundwater extractions to augment surface water diversions.
Lytle Basin		<ul style="list-style-type: none"> Entitled to divert groundwater from Lytle Basin up to 1,300 miner’s inches (~18,800 AFY).
Chino Basin	Chino Basin Judgment, 1978	<ul style="list-style-type: none"> Unrestricted pumping to provide water for beneficial use for FWC customers subject to existing appropriative rights, groundwater storage, leases, and replenishment through Watermaster. Safe yield of Chino Basin = 135,000 AFY (subject to change). 11.659 percent share of the “Operating Safe Yield.”
Rialto Basin	1961 Rialto Basin Decree and 2015 Preliminary Injunction	<ul style="list-style-type: none"> Unrestricted pumping in most years pursuant to the 1961 Rialto Basin Decree. Preliminary injunction limits current production to 2,520 AFY.
No-Man’s Land	Senior Appropriative Pumping Rights	<ul style="list-style-type: none"> No pumping restriction.

Note: AFY = Acre-Feet per Year

Water Supply Planning Provisions

Population growth in the State of California (State) has resulted in additional water demand on water systems. The State legislature has enacted laws to ensure that the increased demands are adequately addressed and that a firm source of water supply is available prior to approval of certain new developments. The regulations include California Water Code Division 6, Part 2.10, Sections 10910-10915 (Water Supply Planning to Support Existing and Planned Future Use) (California Water Code) which is briefly described below. The provisions of the California Water Code seek to promote more collaborative planning between local water suppliers and cities and counties and require detailed information regarding water availability to be provided to city and county land use planners prior to approval of certain specified large land use development projects.

This WSA was prepared pursuant to the requirements of the California Water Code for the approach, required information, and criteria confirming that FWC has sufficient water supplies to meet the projected demands of the Project, in addition to existing and planned future uses. The UWMP is a foundational document for compliance with the California Water Code. The provisions of the California Water Code repeatedly identify the UWMP as a planning document that can be used by a water supplier to meet the standards set forth in both statutes. California Environmental Quality Act (CEQA) guidelines section 15083.5 contains similar provisions regarding consultation with water agencies for certain projects. FWC's 2015 UWMP (June 2016), Metropolitan Water District of Southern California's (MWD's) 2015 UWMP (June 2016), and IEUA's 2015 UWMP Update (June 2016) were prepared pursuant to California Water Code Division 6, Part 2.55, Section 10608 (Sustainable Water Use and Demand Reduction) and California Water Code Division 6, Part 2.6, Sections 10608-10656 (Urban Water Management Planning) and the Water Conservation Act of 2009 (also known as SB X7-7), describe future water demands and future availability of the water supply sources used by FWC and other retail water agencies operating within IEUA's service area. These UWMP documents were used to prepare this WSA.

This WSA includes specific Project water demand estimates and available sources of water supply. FWC will separately notify the Project developer of the specific water supply

distribution system and infrastructure facilities required for FWC to provide water utility service to the Project. In addition to the annual Project water demand estimates shown in Section 4.0 of this WSA, FWC's notice to the Project developer also will include a review of any peaking factors (maximum day demands and peak hour demands), fire flow demands, storage, booster pump, and pipeline infrastructure requirements for the proposed Project together with FWC's estimate of the costs for all of the required facilities which the Project developer must deposit with FWC before those required facilities can be installed.

FWC owns easements, and rights-of-way over the Project site for installation, operation, and maintenance of water facilities and related access to the Project site. Additionally, FWC owns approximately 1,350 linear feet of 10-inch underground concrete water pipelines and 2 concrete weir boxes located on the Project site. The pipelines run north-south across the property and the weir boxes are located along the easterly right-of-way of the property.

California Water Code (Sections 10910-10915)

Existing law requires every urban water supplier to identify, as part of its UWMP, the existing and planned sources of water available to the supplier. Existing law prohibits an urban water supplier that fails to prepare or submit its UWMP to the Department of Water Resources (DWR) from receiving financial or drought assistance from the state until the plan is submitted.

The California Water Code requires an urban water supplier to include in its UWMP a description of all water supply projects and programs that may be undertaken to meet total projected water use over the next 20 years. The California Water Code requires a city or county that determines a project is subject to the CEQA to identify any public water system that may supply water for proposed developments and to request those public water systems to prepare a specific WSA, including for proposed industrial projects occupying more than 40 acres of land or having more than 650,000 square feet (sf) of floor area. If the water demands for the proposed developments have been accounted for in a recently adopted UWMP, the water supplier may incorporate information contained in that plan to satisfy certain requirements of a WSA. The

California Water Code requires the assessment to include, along with other information, an identification of existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project and the quantities of water received in prior years pursuant to those entitlements, rights, and contracts.

The California Water Code also requires the public water system, or the city or county, as applicable, to submit its plans for acquiring additional water supplies if that entity concludes that water supplies are, or will be, insufficient.

3.0 FWC’S HISTORICAL WATER SUPPLIES AND USES

HISTORICAL WATER SUPPLIES

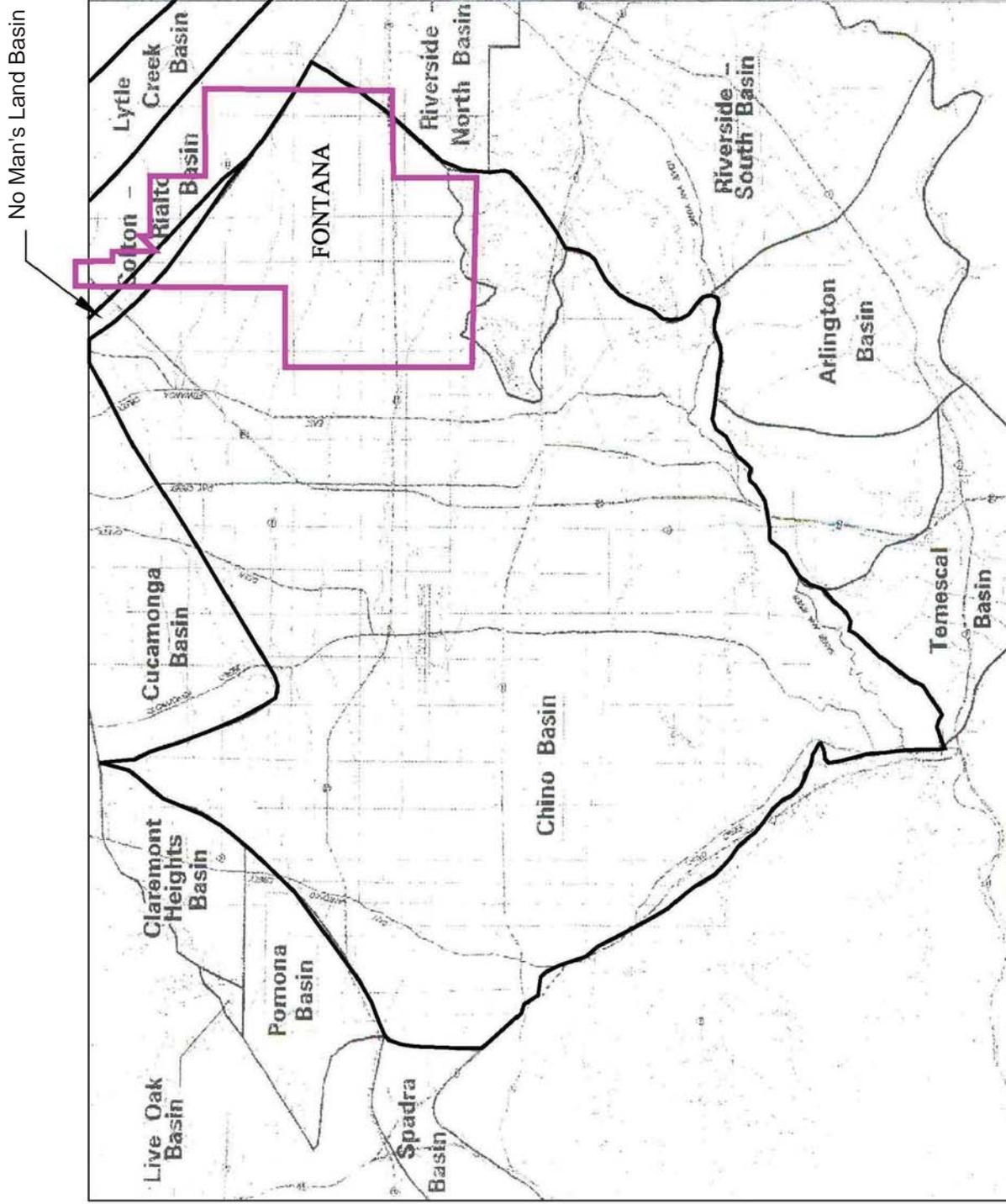
FWC is a public utility water company subject to the regulatory jurisdiction of the CPUC. FWC provides public utility water service in most of the City of Fontana and in portions of the cities of Rialto and Rancho Cucamonga, and in adjoining unincorporated areas of San Bernardino County. FWC’s CPUC authorized certificated service area encompasses approximately 52 square miles bordered generally by the Riverside County line on the south, Etiwanda and Cherry Avenues on the west, Lytle Creek Wash and Linden Avenue on the east, and Highland and Summit Avenues on the north, as shown on Figure 1.

FWC currently derives its water supply from 29 active groundwater production wells and a surface water treatment plant, the Sandhill Water Treatment Plant. The water supply is produced from groundwater wells in the Chino Basin, Rialto Basin, Lytle Basin, and the No-Man’s Land Basin (an unnamed basin between the Chino Basin and the Rialto Basin), and surface water from Lytle Creek. FWC also receives untreated SWP water from IEUA and SBVMWD which is treated at FWC’s Sandhill Water Treatment Plant. The groundwater basins are shown on Figure 2. FWC receives well water, local surface water, imported water, or a combination of those sources at various points in its water distribution system. In addition, FWC has two emergency interconnections, with a total capacity of 2,500 gallons per minute (gpm), to receive water from Cucamonga Valley Water District (CVWD). Emergency interconnections are distribution system interconnections between water purveyors for use during critical situations where one system is temporarily unable to provide sufficient potable water to meet minimum health and/or fire protection needs. Emergency interconnections allow FWC to continue serving water during critical situations such as local water supply shortages as a result of earthquakes, fires, prolonged power outages, and droughts.

Table 1 summarizes FWC’s water rights, most of which are held by Fontana Union Water Company (Fontana Union) and are subject to FWC’s irrevocable right to utilize, pursuant to court-approved agreements with CVWD and Fontana Union of which FWC is a principal shareholder.

Historical annual water supplies utilized by FWC are summarized in Table 2. Annual water supplies from 1999 to 2018 ranged from 34,895 acre-feet (AF) in 2016 to 49,879 AF in 2007, with an average annual production of 43,385 AFY.

FIGURE 2



CHINO GROUNDWATER BASIN AND SURROUNDING BASINS

TABLE 2 HISTORICAL ANNUAL WATER SUPPLY PRODUCTION BY FWC (AFY)

Year	Groundwater					Imported Water	Lytle Creek	Recycled Water	Total
	Lytle Basin	Chino Basin	Rialto Basin	No-Man's Land	Subtotal				
1999	15,540	17,175	2,935	0	35,650	--	5,734	--	41,385
2000	13,236	20,555	3,552	2,289	39,631	--	4,155	--	43,786
2001	8,869	18,766	6,106	3,123	36,864	--	6,235	--	43,098
2002	7,520	23,060	9,452	3,135	43,166	933	2,048	--	46,147
2003	6,029	22,110	9,321	3,783	41,243	2,040	3,502	--	46,785
2004	5,664	24,718	8,173	3,930	42,485	2,530	4,484	--	49,498
2005	11,424	18,499	7,252	3,550	40,726	520	6,352	--	47,597
2006	12,593	14,747	5,695	3,683	36,718	640	11,999	--	49,356
2007	15,021	19,622	7,325	3,930	45,899	0	3,980	--	49,879
2008	10,523	16,192	6,312	4,165	37,191	2,765	7,613	--	47,569
2009	7,789	14,490	8,480	4,293	35,051	3,923	5,390	--	44,363
2010	7,073	9,921	7,782	4,421	29,197	1,099	11,473	--	41,769
2011	9,573	2,509	6,386	3,392	21,860	977	18,576	--	41,413
2012	12,604	13,305	6,306	3,875	36,090	1,086	5,616	--	42,791
2013	8,025	11,604	7,358	4,119	31,105	9,898	3,301	--	44,304
2014	5,530	13,784	7,347	4,103	30,764	9,784	1,951	--	42,498
2015	3,768	14,504	2,728	4,523	25,523	7,657	1,784	--	34,964
2016	2,649	16,299	2,563	4,341	25,852	7,617	1,419	7	34,895
2017	4,111	10,640	2,378	4,533	21,662	11,824	3,867	128	37,481
2018	5,148	10,796	2,679	4,069	22,692	12,961	2,298	163	38,113

Notes:

“Imported Water” deliveries of SWP water to FWC began in 2002; “Recycled Water” deliveries began in 2016

Sources:

FWC records

The following describes the FWC’s sources of water supplies and water rights in more detail.

Chino Basin

The Chino Basin is FWC's largest and most reliable groundwater source. During the last 20 years, FWC's production from the Chino Basin ranged from approximately 2,509 AFY in 2011 to 24,718 AFY in 2004, as shown in Table 2. In most years, the Chino Basin accounted for a significant portion of FWC's total water supply.

The Chino Basin, in San Bernardino County, is the largest groundwater basin in the Upper Santa Ana River Watershed. The Chino Basin is bounded by the Rialto-Colton, Chino, San Jose, and Cucamonga faults, and by the Puente Hills and the San Gabriel Mountains. The total surface area of the basin is approximately 154,000 acres (240 square miles).

The Chino Basin currently has over 5,000,000 AF of water in storage, with an additional unused storage capacity, based on historical water levels in the basin, of about 1,000,000 AF. Over the past 20 years, total groundwater production from the Chino Basin has ranged from approximately 140,687 AFY to 188,910 AFY¹. A majority of production is pumped for municipal and industrial purposes and the remaining production is pumped by agricultural producers.

The Chino Basin was adjudicated under the Chino Basin Judgment, entered on January 27, 1978 by the Superior Court for the County of San Bernardino. FWC is a party to the Chino Basin Judgment and is classified as an appropriator. The Chino Basin Judgment established an average Safe Yield in the Chino Basin of 135,000 AFY (July 1 to June 30). The Safe Yield is defined in the Chino Basin Judgment as "the long-term average annual quantity of ground water (excluding replenishment of stored water but including return flow to the Basin from use of replenishment or stored water) which can be produced from the Chino Basin under conditions of a particular year without causing an undesirable result." The 1978 Chino Basin Judgment's allocation of the Safe Yield of the Chino Basin includes three separate Pools: the "Overlying Agricultural Pool (82,800 AFY)", the "Overlying Non-Agricultural Pool (7,366 AFY)", and the "Appropriative Pool (45,834AFY)." FWC's appropriative rights together with those of Fontana Union (of which FWC is a principal shareholder) amount to approximately 11.659 percent share of the Safe Yield. Appendix B provides the historical Chino Basin production by Pool presented in the Central Basin Watermaster's "Fiscal Year 2017-18 Annual Report".

¹ Pursuant to the Chino Basin Watermaster "Fiscal Year 2017-18, 41st Annual Report", Appendix H

Appropriators who are parties to the Chino Basin Judgment, such as FWC, are authorized to produce groundwater in excess of their rights. Appropriators pay assessments for such production to the Chino Basin Watermaster. The assessments are used to replenish the basin through imported surface water recharge. The Chino Basin Watermaster purchases water to replenish the Chino Basin from the MWD through IEUA. Additional supplemental sources of replenishment water come from recycled water and from increased recharge of local storm water. Reliability of water purchased from IEUA to replenish the Chino Basin is discussed in Section 4.

In addition, the Chino Basin Watermaster reallocates the unused portion of the Chino Basin safe yield from the Overlying Agricultural Pool to the Appropriative Pool members as a supplement to the Appropriative Pool share of Operating Safe Yield rights in any year. These transfers are permanent if agricultural land has been converted to non-agricultural use, or temporary if agricultural pool extractions are less than their share of the safe yield. From fiscal year 1998-99 to fiscal year 2017-18, the total portion of the annual Agricultural Pool available for reallocation to Appropriative Pool members² has ranged from 38,399 AF to 56,633 AF, with an annual average of approximately 48,251 AF. As agricultural production declines within the Chino Basin, the reallocation of water to the Appropriative Pool will increase.

Lytle Creek Region

FWC produces water from the Lytle Creek Region that consists of surface water from Lytle Creek and groundwater from Lytle Basin. The Lytle Creek Watershed is approximately 46.4 square miles. The area of the Lytle Basin is approximately 22.3 square miles. Lytle Creek is located in the Lytle Creek Watershed which originates in the vicinity of Mount San Antonio in the San Bernardino National Forest and includes the Upper Santa Ana River Basin located in San Bernardino County. Lytle Creek includes the North Fork Lytle Creek, Middle Fork Lytle Creek, and South Fork Lytle Creek, each flowing eastward. Water from Lytle Creek is diverted by Southern California Edison to generate electricity from two hydroelectric power plants in the Lytle Creek Region. Following the power generation, Lytle Creek water is diverted to FWC's Afterbay where it is shared with other water purveyors pursuant to long standing agreements. FWC's share is diverted to FWC's Sandhill Water Treatment Plant where it is treated for domestic water use within FWC's distribution system. In addition to Lytle Creek surface flows,

² Pursuant to the Chino Basin Watermaster "Fiscal Year 2017-18, 41st Annual Report", Appendix G

FWC obtains water from the Grapeland Tunnel, which is a groundwater infiltration system with extensive collector lines in Lytle Creek Canyon tributaries and a large line running below the streambed of Lytle Creek. Water from the Grapeland Tunnel historically flowed through a large transmission pipeline directly into FWC's water system. Because water from the Grapeland Tunnel is under the influence of surface water, water from the Grapeland Tunnel is currently combined with the Lytle Creek stream flow in the Afterbay and then flows to the Sandhill Water Treatment Plant.

The 1897 McKinley Decree, which specifies surface water allocations, and the January 28, 1924 Judgment by the Superior Court for the County of San Bernardino, which confirms the McKinley Decree and specifies allowed groundwater diversions, allow Fontana Union Water Company and FWC to divert surface water and pump groundwater from the Lytle Creek Region up to a maximum of 3,480.78 miner's inches, or 69.6 cubic feet per second (cfs) (approximately 50,400 AFY). The amount includes up to 2,500 miner's inches, (approximately 36,200 AFY) of allowable combined surface and groundwater extractions to augment deficiencies in surface water diversions. FWC is allowed to extract and divert a combined 1,300 miner's inches, or 26 cfs (approximately 18,800 AFY) of groundwater from the Lytle Creek Region. The Lytle Basin is managed by the Lytle Creek Water Conservation Association which is made up of the successors to the parties of the 1897 McKinley Decree and the 1924 Judgment. FWC's diversion and production of water from the Lytle Creek Region can vary due to fluctuations in rainfall, snowpack and runoff, especially during dry years.

Rialto Basin

The Rialto Basin underlies a portion of the Upper Santa Ana Valley in southwestern San Bernardino County and northwestern Riverside County. The Rialto Basin is about 10 miles long and varies in width from about 3.5 miles in the northwestern part to about 1.5 miles in the southeastern part. The Rialto Basin is bounded by the San Gabriel Mountains on the northwest, the San Jacinto fault on the northeast, the Badlands on the southeast, and the Chino Basin and No-Man's Land Basin on the southwest.

Under the December 22, 1961 Rialto Basin Court Decree, FWC, by virtue of its shareholdings in Fontana Union, is entitled to produce water from the Rialto Basin with no extraction limit in most years. Parties to the Rialto Basin Decree, including FWC, are authorized to pump from the Rialto Basin without limitation, except pumping during certain months in some water years can be affected by groundwater elevations measured between March and May for

three specific “index” wells (Duncan Well, Willow Street Well, and Boyd Well). In February 2015, a San Bernardino Superior Court judge granted a request for a preliminary injunction from the Cities of Colton and Rialto and West Valley Water District. The 2015 preliminary injunction allows FWC to pump up to 2,520 AFY from the Rialto Basin.

No-Man’s Land Basin

FWC and Fontana Union hold senior appropriative pumping rights which entitle them to produce groundwater from the No-Man’s Land Basin. This basin is located between the Rialto and Chino Basins and is hydrogeologically separate from them. Water production from this basin is not a part of either the Chino Basin Judgment or the Rialto Basin Decree and is not subject to adjudicated production limitations or assessments. Groundwater pumping rights in the No-Man’s Land Basin are governed by contractual arrangements approved by the U.S. Bankruptcy Court confirmed Plan of Reorganization for Fontana Union, which affects the Fontana Union, FWC, CVWD, City of Rialto, West Valley Water District and other parties.

Inland Empire Utilities Agency

IEUA, originally known as Chino Basin Municipal Water District, was formed by popular vote of its residents in June 1950, to become a member agency of MWD for the purpose of importing supplemental water to augment local stream and groundwater supplies. Since its formation in 1950, IEUA has significantly expanded its services. These include production of recycled water, wholesaling of untreated imported water and recycled water supplies, sewage treatment, co-composting of manure and municipal biosolids, desalinization of groundwater supplies and disposal of non-reclaimable industrial wastewater and brine. IEUA does not provide treated MWD water to retail water purveyors in its service area.

FWC is located within IEUA’s service area. FWC has upgraded (including construction of conventional pretreatment facilities and capacity expansion) its existing surface water treatment plant (the Sandhill Water Treatment Plant) to treat SWP water from IEUA and SBVMWD, in addition to surface water from Lytle Creek. The Sandhill Water Treatment Plant upgrades increased the plant’s capacity from 17 million gallons per day (MGD) to 29 MGD. FWC has the facilities and capacity to receive up to 40 cfs of untreated imported SWP water from IEUA and 14 cfs of untreated imported SWP water from SBVMWD. IEUA’s water management goals and implementation strategies, such as its imported water distribution policy,

groundwater banking, conjunctive use programs, and use of recycled water, enhances the reliability of water supplies utilized by FWC. The following discussion of water sources, future water demands, and future water supplies in IEUA's service area illustrates that sufficient water is available for FWC and the other purveyors within IEUA's service area in the future.

IEUA wholesales untreated water and provides industrial/municipal wastewater collection and treatment services, and other related services for the western portion of San Bernardino County. IEUA's service area is located in the southwestern section of San Bernardino County. The 242-square mile service area, which encompasses the Chino Groundwater Basin, consists of a relatively flat alluvial valley from east to west which slopes downward from north to south at a one to two percent grade.

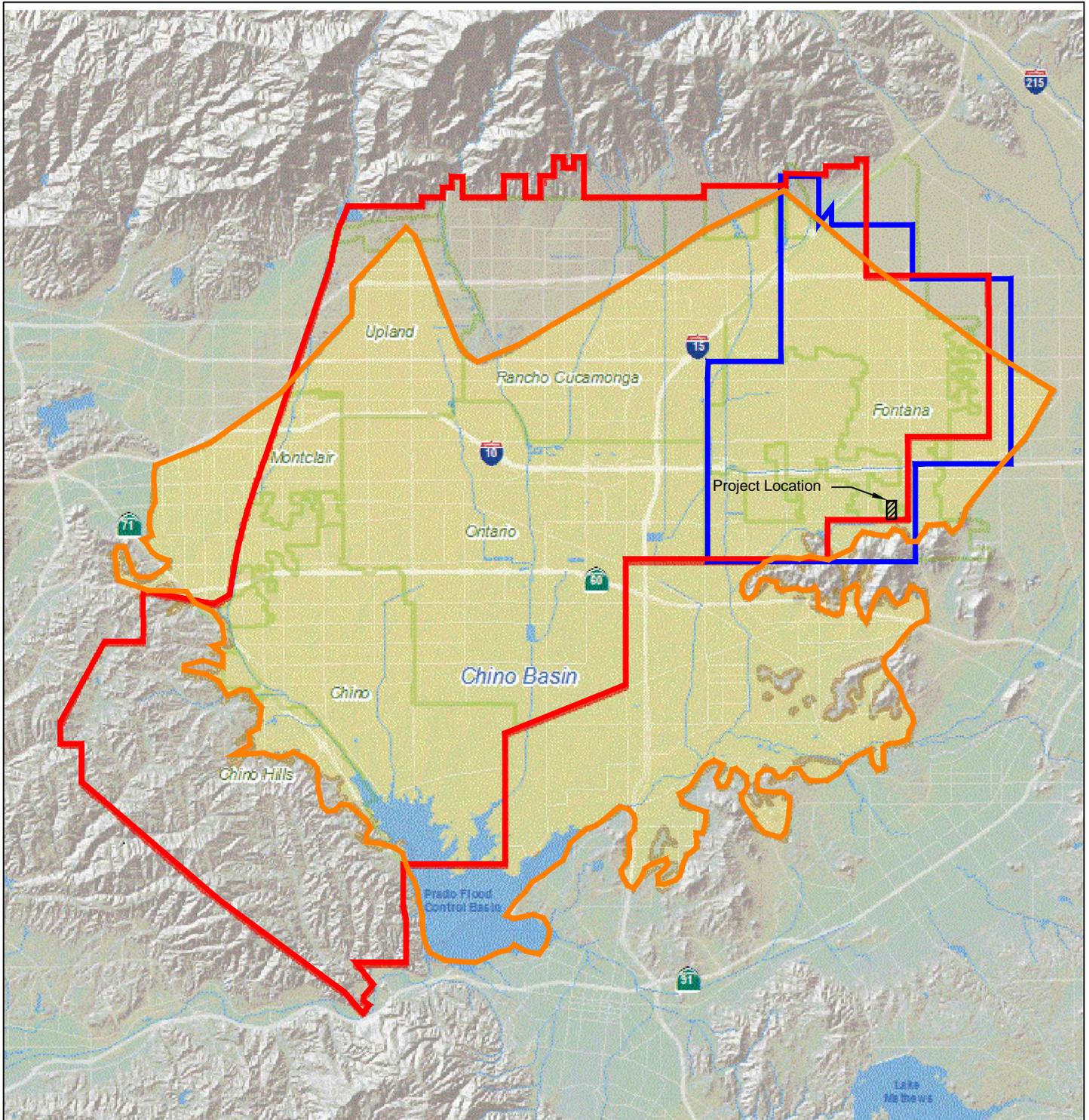
IEUA's service area includes the cities of Fontana, Chino, Chino Hills, Montclair, Pomona, Ontario, Rancho Cucamonga and Upland. According to IEUA's 2015 UWMP, approximately 856,200 people resided in IEUA's service area as of 2015. IEUA's service area, as shown in Figure 3, lies almost entirely within the Chino Groundwater Basin.

Water used in IEUA's service area comes from both local and imported sources. Local sources include local groundwater, surface water and, most recently, recycled water. IEUA purchases untreated imported water from MWD for wholesale redistribution to local retail water purveyors within its service area, including FWC. The local retail water purveyors must first treat the imported MWD water before delivery to their potable water customers.

According to IEUA's 2015 UWMP, total local groundwater production by FWC and other local retail water agencies in IEUA's service area was approximately 112,600 AF in fiscal year 2014-15, which includes production from the Chino Basin as well as the other local groundwater sources shown in Figure 2.

FWC and a number of other retail water agencies in IEUA's service area that produce groundwater from the Chino Basin also obtain a portion of their water from local surface sources. The principal sources of surface water include Lytle Creek, San Antonio Canyon, Cucamonga Canyon, Day Creek, Deer Creek, and several smaller surface streams. According to IEUA's 2015 UWMP, annual production from all such local surface supplies was approximately 11,700 AF in fiscal year 2014-15.

FWC has capacity to receive up to 40 cfs of MWD imported SWP water from IEUA for treatment at FWC's existing Sandhill Water Treatment Plant. Historical MWD deliveries to IEUA's service area are shown in Table 3. Full service imported water deliveries from MWD to IEUA have increased significantly in the past twenty years from approximately 41,600 AF of water in fiscal year 1998-99 to a peak of approximately 81,616 AF in fiscal year 2008-09. Additional imported water supplies from IEUA are used for groundwater replenishment, thereby augmenting the annual yield and production from the Chino Basin.



-  IEUA Service Area Boundary
-  Fontana Water Company Service Area Boundary
-  Chino Groundwater Basin Boundary

Source : 2010 Inland Empire Utilities Agency Urban Water Management Plan

IEUA SERVICE AREA BOUNDARY, CHINO BASIN BOUNDARY
FONTANA WATER COMPANY SERVICE AREA BOUNDARY, AND PROJECT AREA

Table 3 MWD Historical Water Purchases by IEUA ¹ (AFY)

Fiscal Year	Full Service	Agricultural	Interruptible/Local Projects	Storage ²	Total
1990-91	20,015.9	26.2	28,071.0	4,011.70	52,124.80
1991-92	31,924.5	152.0	0.0	75,976.10	108,052.60
1992-93	34,032.2	94.4	0.0	51,554.10	85,680.70
1993-94	28,897.1			28,046.90	56,944.00
1994-95	36,967.8	8.5		1,579.50	38,555.80
1995-96	35,204.1	77.4		4,408.80	39,690.30
1996-97	44,728.2	118.8		5,058.70	49,905.70
1997-98	39,320.6	83.8		11,895.10	51,299.5
1998-99	41,599.5	76.4	100.3	8,414.1	50,190.3
1999-00	57,070.3	104.1	495.5	5,332.1	63,002.0
2000-01	57,735.6	45.1	3,841.8	11,742.5	73,365.0
2001-02	64,996.3	44.0	4,498.9	9,006.3	78,545.5
2002-03	60,082.5	43.3	5,637.2	13,449.9	79,212.9
2003-04	64,024.7	49.3	6,561.1	7,582.0	78,217.1
2004-05	54,841.4	56.4	5,653.0	42,259.4	102,810.2
2005-06	50,607.8	90.4	8,916.5	36,227.8	95,842.5
2006-07	52,869.1	89.7	11,331.2	24,759.1	89,049.1
2007-08	70,780.0	43.2	21,307.8	0.0	92,131.0
2008-09	81,615.9	3.0	24,664.2	0.0	106,283.1
2009-10	65,539.60		20,245.1	0.0	85,784.7
2010-11	51,134.4		20,646.1	9,650.6	81,431.1
2011-12	52,059.6		20,212.9	24,407.8	96,680.3
2012-13	59,050.9		25,435.0		84,485.9
2013-14	67,833.1		26,800.8		94,633.9
2014-15	58,907.7		23,734.6		82,642.3
2015-16	31,713.8		22,933.2		54,647.0
2016-17	47,848.4		25,390.7		73,239.1
2017-18	68,157.7		13,009.9		81,167.6

1) Source: Metropolitan Water District of Southern California, Operations Data. Data includes full service, agricultural, local project, and/or storage program sales.

2) Seasonal Storage Service Program and Cyclic Storage Account

Water recycling involves treatment of wastewater to create a high quality, safe source of water for landscape irrigation, industrial uses, and groundwater recharge. A recycled water marketing program was initiated by IEUA in 1999. Recycled water is a critical component of the Optimum Basin Management Plan developed by the Chino Basin Watermaster in 2000 to address water supply and quality issues in the Chino Basin. Recycled water has become an increasingly important source of renewable local water supply for the region. FWC has already taken steps in constructing a recycled water system and is preparing to provide recycled water, once it is available, to customers in its service area who are able to use recycled water. Based on the IEUA’s “2017/18 Recycled Water Annual Report,” recycled water supplies from IEUA’s facilities totaled approximately 53,225 AF in fiscal year 2017-18. The total recycled water demands in IEUA’s service area in fiscal year 2017-18 were 34,642 AF, or approximately 65 percent of the available recycled water supply. The recycled water supply and demand from IEUA’s facilities is expected to increase to 82,900 AF and 68,000 AF, respectively, by fiscal year 2039-40 (IEUA 2015 UWMP, Tables 2-8 and 3-3). Remaining future projected recycled water supplies will be used for groundwater recharge purposes and to meet Santa Ana River obligations.

The population within IEUA’s service area is projected by the local retail water agencies (including FWC) to collectively increase from approximately 896,500 in 2020 to 1,125,200 people by the year 2040 (Table 4). This represents an increase of approximately 228,700 people over a 20-year period, an average annual growth rate of approximately 1.3 percent.

TABLE 4 PROJECTED POPULATION IN IEUA’S SERVICE AREA ¹

Year	2020	2025	2030	2035	2040
Population	896,533	955,569	1,009,349	1,067,946	1,125,203

1) Source: IEUA 2015 UWMP (June 2016), Table 1-5

As a result of this projected regional population growth, water demand in IEUA’s service area is expected to increase by approximately 32 percent over the twenty-year period from 2020 to 2040. Table 5 presents the projected water demands for IEUA’s service area. According to IEUA’s 2015 UWMP, total annual water use is expected to increase from approximately 210,600 AF in fiscal year 2019-20 to approximately 278,000 AF in fiscal year 2039-40.

TABLE 5 PROJECTED WATER DEMANDS IN IEUA'S SERVICE AREA ¹ (AFY)

Year	2020	2025	2030	2035	2040
Residential, Commercial, Industrial, and Agricultural	165,854	176,389	188,705	196,831	210,048
Recycled Water (Direct Reuse)	44,734	49,534	54,027	57,890	67,969
Total Demand	210,588	225,923	242,732	254,721	278,017

1) Source: IEUA 2015 UWMP (June 2016), Tables 2-4 and 2-8.

Projected water supplies within IEUA's service area include groundwater, surface water, recycled water, and untreated imported water purchased from MWD. Table 6 summarizes the available supplies and water demands under a normal year.

TABLE 6 IEUA FUTURE WATER DEMAND/SUPPLY BALANCE IN NORMAL YEARS ¹ (AFY)

Year	2020	2025	2030	2035	2040
Groundwater ²	137,497	137,497	137,497	137,497	137,497
Surface Water	11,651	11,651	11,651	11,651	11,651
Recycled Water	41,836	47,657	47,657	47,657	47,657
Imported Water	69,752	69,752	69,752	69,752	69,752
Water Supply Water Use Efficiency	9,788	11,984	17,257	22,570	27,802
Supplemental Supply Opportunities	0	0	0	0	283
Total Supply	270,524	278,541	283,814	289,127	294,642
Total Demand	210,588	225,923	242,732	254,721	278,017
Surplus	59,936	52,618	41,082	34,406	16,622

1) Source: IEUA 2015 UWMP (June 2016), Tables 3-1 and 3-9

2) Includes groundwater from Chino Basin, treated groundwater from the Chino Basin Desalter, and groundwater from other adjacent basins.

According to IEUA's 2015 UWMP, total production from the Chino Basin and adjacent groundwater basins is projected at 137,500 AFY through fiscal year 2039-40 for normal years, although the Chino Basin could accommodate much greater water production rates if necessary.

According to IEUA's 2015 UWMP, IEUA conservatively projected total production from surface water supplies within its service area at approximately 11,700 AFY through fiscal year 2039-40 for normal years. Surface water flows are substantially greater in wet years and less during dry years.

According to IEUA's 2015 UWMP, the direct use of recycled water within IEUA's service area in fiscal year 2014-15 was approximately 33,400 AF. Recycled water use during normal years is expected to increase to approximately 68,000 AFY by fiscal year 2039-40. As part of an existing agreement with IEUA, the City of Fontana is entitled to approximately 12,000 AFY of tertiary treated recycled water. FWC has undertaken a project with the City of Fontana for the direct use of recycled water in the southern portion of FWC's service area known as the 1158 Zone. This project will provide up to approximately 2,000 AFY of recycled water within the City of Fontana to schools, parks, and commercial customers as part of a multi-phased program. Additional discussion regarding recycled water is provided in Section 5.0.

The demand for untreated imported Colorado River and SWP water for the Chino Basin in normal years is projected to be 69,800 AFY through fiscal year 2039-40.

FWC supports and works closely with IEUA to implement a mix of water management strategies to meet the region's long-term needs. IEUA's water management goals are the following:

- Implement an effective conservation program that will maximize efficient water use and reuse in IEUA's service area;
- Continue development of a groundwater recovery program;
- Increase the safe storage capacity of the Chino Basin to 150,000 AFY and implement a conjunctive use/groundwater management program that provides dry year water supplies for the service area (the increased safe storage capacity potential is 500,000 AFY). In 2008, IEUA completed a CEQA document for the proposed expansion of the program;

- Achieve maximum use of all available storm water;
- Achieve maximum reuse of all available recycled water; and
- Minimize dependence on imported water supplies.

The water demands and supplies for IEUA’s service area were analyzed by IEUA to assess the region’s ability to meet demands given a repeat of California’s severe drought from 2011 to 2014. Table 7 and Table 8 present the supply-demand balance for single and multiple year drought scenarios for fiscal years 2019-20 and 2039-40. With the implementation of the local programs outlined above, the region is expected to meet 100 percent of its dry year demand.

TABLE 7 IEUA’S 2020 WATER SUPPLY AND DEMAND IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS ¹ (AFY)

Demand and Supply	Normal Year	Single Dry Year	Multiple Dry Years		
			Dry Year 1	Dry Year 2	Dry Year 3
Total Water Supply	270,524	270,524	270,524	270,524	270,524
Total Demand	210,588	213,213	214,786	214,786	214,786
Surplus	59,936	57,311	55,738	55,738	55,738

1) Source: IEUA 2015 UWMP (June 2016), Tables 3-10 and 3-11

TABLE 8 IEUA’S 2040 WATER SUPPLY AND DEMAND IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS ¹ (AFY)

Demand and Supply	Normal Year	Single Dry Year	Multiple Dry Years		
			Dry Year 1	Dry Year 2	Dry Year 3
Total Water Supply	294,642	294,642	294,642	294,642	294,642
Total Demand	278,017	288,415	294,642	294,642	294,642
Surplus	16,622	6,228	0	0	0

1) Source: IEUA 2015 UWMP (June 2016), Tables 3-10 and 3-11

San Bernardino Valley Municipal Water District

SBVMWD was formed in 1954. It is an independent SWP contractor and is not a member agency of MWD. The District's services include providing wholesale distribution of untreated imported SWP water, and wastewater, stormwater disposal, recreation, and fire protection services.

SBVMWD, which covers approximately 325 square miles in southwestern San Bernardino County, serves a population of approximately 600,000. SBVMWD's service area includes the eastern two-thirds of the San Bernardino Valley, the Crafton Hills, and a portion of the Yucaipa Valley, and includes the cities and communities of San Bernardino, Colton, Fontana, Loma Linda, Redlands, Rialto, Bloomington, Highland, Grand Terrace, and Yucaipa.

Groundwater from the Colton, Rialto, Bunker Hill, Yucaipa, and San Timoteo Basins, is the principal local source of supply in SBVMWD's service area. Other sources of water supply include surface water from Lytle Creek, the Santa Ana River, and Mill Creek as well as imported SWP water.

SBVMWD's contract entitlement for SWP water was 1,677 AF in 1972, the initial year of deliveries, and increased to a maximum entitlement of 102,600 AF in 1991. The entitlement is the fifth largest of all SWP contractors.

FWC has the ability to purchase and use untreated imported water from SBVMWD. A portion of FWC's service area is within SBVMWD's service area. FWC did not receive any SWP water from SBVMWD from 2012 to 2018. FWC projects receiving up to 2,000 AFY of imported untreated SWP water from SBVMWD. FWC has upgraded its existing Sandhill Water Treatment Plant to treat approximately 29 MGD of Lytle Creek surface water and SWP water. The Sandhill Water Treatment Plant will treat the imported untreated SWP water from SBVMWD in addition to treating available Lytle Creek surface water and SWP water from IEUA. FWC expects to receive greater quantities of SWP water from SBVMWD as population growth and development increase in the SBVMWD portion of FWC's service area.

4.0 FWC'S FUTURE WATER DEMANDS WITH THE PROJECT

FWC's 2015 UWMP was completed and adopted in June 2016 and includes water demand projections for FWC's service area over the next twenty years (through 2040).

Water demands projected in FWC's 2015 UWMP were calculated based on the urban per capita water use target developed per the Water Conservation Bill of 2009 (SB X7-7) and population projections within FWC's service area. Methodologies for calculating urban per capita water use were published by DWR in its October 2010 guidance document³. The methodology applied to FWC included an urban per capita water use reduction of 20 percent by 2020. DWR's guidance document was used by FWC to calculate urban per capita water use targets of 198 gallons per capita day, by 2015, and 176 gallons per capita day, by 2020.

Projected water demands for the proposed Project include commercial, industrial and landscape irrigation demands. Based on the Project site map prepared by HPA Architecture, the proposed Project is estimated to include approximately 1,118,460 sf of office and warehouse building space with parking and pavement on a Project site of approximately 47.50 acres. The total Project water demand was estimated by multiplying the planned Project site area by a water use rate of 2,200 gallons per day (gpd) per acre derived from recorded water use data in industrial / commercial areas within FWC's service area. The estimated water demand for the commercial and industrial area of the Project is approximately 63 AFY (or $1,118,460 \text{ sf} \times (1 \text{ acre} / 43,560 \text{ sf}) \times 2,200 \text{ gpd per acre} \times (0.00112 \text{ AFY} / 1 \text{ gpd})$).

The Project landscape irrigation demand was estimated using a water budget calculator from DWR. The water budget calculator estimates the water use of a landscaped area based on the following components:

- Reference Evapotranspiration (ET_o)

³ California Department of Water Resources, Division of Statewide Integrated Water Management, Water Use and Efficiency Branch. *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*. February 2016.

- ETo refers to the total amount of water lost through evaporation in the soil and transpiration of plants
- The average ETo in the vicinity of the Project site averaged 60.77 inches per year⁴
- Plant Factor (PF)
 - The PF is a factor (generally from 0 to 1) for each type of irrigated plant and is based on the water requirements for the plant
 - Plants with a lower PF (0 to 0.3) require less water than plants with a higher PF (0.7 to 1.0). The PF for turf is approximately 0.7⁵. The PF for medium water use trees, shrubs and groundcover is approximately 0.5. A PF of 0.6 has been estimated for the Project which is based on different landscaped areas consisting of turf, trees, shrubs and groundcover.
- Irrigated Area (IA)
 - Based on the Project site map prepared by HPA Architecture, the irrigated area is approximately 181,790 square feet
- Irrigation Efficiency (IE)
 - The IE is a factor (generally from 0 to 1) which represents irrigation efficiency.
 - Irrigation systems which are well designed and operated can have an efficiency range of 0.8 to 0.9. Irrigation systems which are poorly designed and operated may have efficiencies less than 0.5⁶. An irrigation efficiency of 0.7 (representing rotor and standard drip irrigation) has been estimated for the Project.

The estimated irrigation water demand at each potential site is then calculated based on the following formula:

⁴ Pursuant to the International Water Management Institute's "World Water & Climate Atlas" (<http://wcatlas.iwmi.org>)

⁵http://ucanr.edu/sites/UrbanHort/Water_Use_of_Turfgrass_and_Landscape_Plant_Materials/SLIDE_Simplified_Irrigation_Demand_Estimation/

⁶ "A Guide to Estimating Irrigation Water Needs of Landscape Plantings in California", University of California Cooperative Extension California, DWR, August 2000

$$\text{Irrigation Water Demand} = (\text{ETo}) \times (0.62) \times ([\text{PF} \times \text{IA}] / \text{IE})$$

It should be noted 0.62 represents a factor used to convert units from “inches per year” to “gallons per square foot per year”. The potential irrigation water demand is in units of “gallons per year”. Based on the formula, the estimated irrigation water demand for the Project is approximately 5,870,892 gallons per year (or 60.77 inches x 0.62 x ([0.6 x 181,790 square feet] / 0.7)) or 18 AFY (or 5,870,892 gallons per year x (1 acre-foot / 325,851 gallons)).

The total estimated water demand for the Project, which includes commercial and industrial water demands (63 AFY) and landscape irrigation (18 AFY), is approximately 81 AFY.

FWC’s 2015 UWMP includes current and projected future water demands for its service area over the next twenty years. It is anticipated construction of the Project will be completed by September 2020. Based on FWC records, water use at the Project site over the past five years has averaged approximately 12 AFY. The net additional water demand for the Project (or Project water demand less existing water demand) is approximately 69 AFY (or 81 AFY – 12 AFY). For the purposes of this WSA, the total net additional water demand of 69 AFY for the Project will be added to existing and future demands accounted for in FWC’s adopted 2015 UWMP over a 20-year period and through 2040, as shown in Table 9.

It should be noted, the projected water demands for the currently proposed “Southwest Fontana Logistics Center Project” (a separate project located within FWC’s service area) were also not included in the overall water demands identified in FWC’s 2015 UWMP. As a result, the projected water demands from the separate “Southwest Fontana Logistics Center Project” are also incorporated in FWC’s overall water demands for the purposes of this Goodman Industrial Park Fontana III Project WSA. The overall projected water demands for FWC, which include water demand projections from FWC’s 2015 UWMP, the proposed Project, the proposed “Southwest Fontana Logistics Center Project” are provided in Table 9.

TABLE 9 PROJECT WATER DEMAND ESTIMATES (AFY)

YEAR	2020	2025	2030	2035	2040
FWC Projected Water Demands ¹	40,140	47,536	50,733	53,711	56,562
Additional Project Demands (Project) ²	69	69	69	69	69
Additional Project Demands (SFLCP) ³	104	104	104	104	104
Total FWC Projected Water Demands	40,313	47,709	50,906	53,884	56,735

Notes:

¹ Demand projections reported in FWC's 2015 UWMP.

² Net additional water demands from the Goodman Industrial Park Fontana III Project are assumed to be in addition to water demands identified from FWC's 2015 UWMP. It is anticipated water demands for the Project will begin by 2020.

³ Net additional water demands from the Southwest Fontana Logistics Center (SFLC) Project are assumed to be in addition to water demands identified from FWC's 2015 UWMP. It is anticipated water demands for the SFLC Project will begin by 2020.

5.0 FWC'S FUTURE WATER SUPPLIES

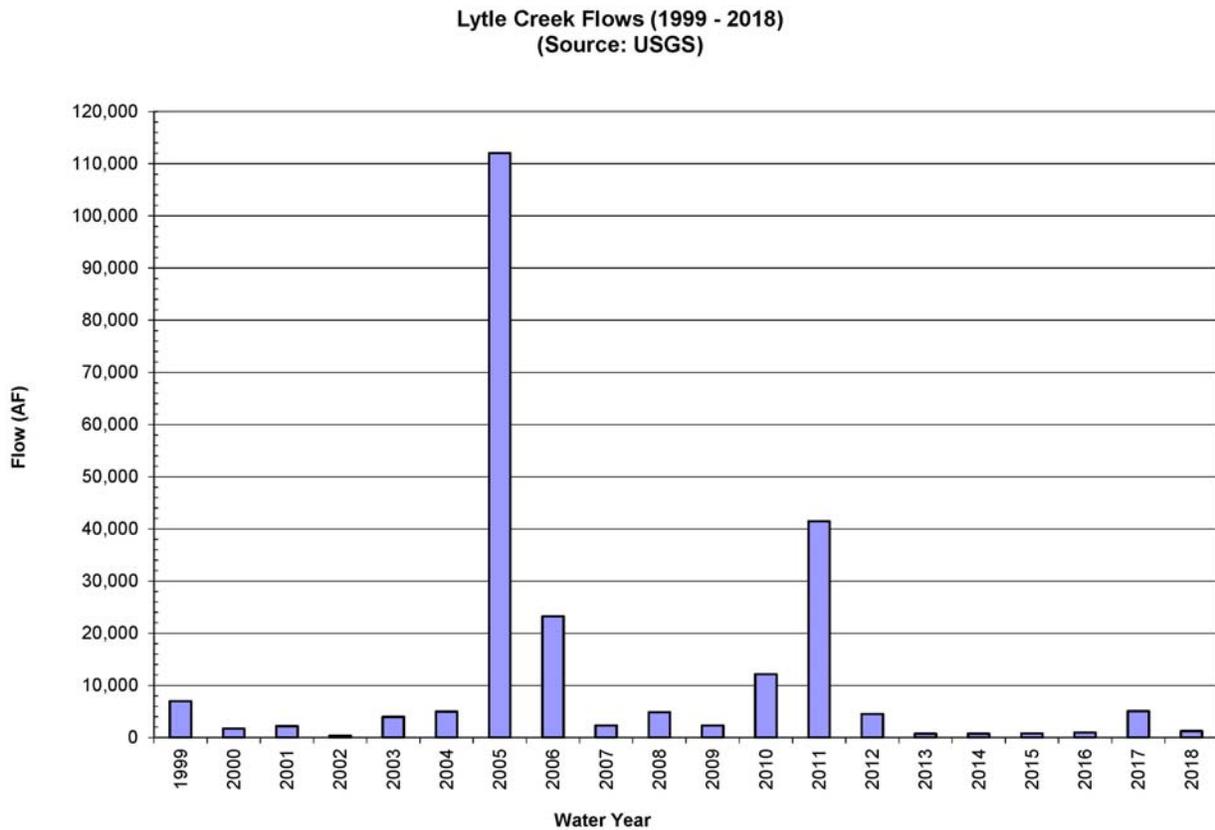
FWC's principal future water supplies available and documented in its 2015 UWMP are groundwater pumped from Chino Basin, Lytle Basin, Rialto Basin, and the No-Man's Land Basin, surface water from Lytle Creek, recycled water, and imported water from SBVMWD and IEUA. The following describes the potential yield from these sources.

LYTLE CREEK

FWC is entitled to divert up to 3,480.78 miner's inches (approximately 50,400 AFY) from the Lytle Creek Region, including up to 2,500 miner's inches (approximately 36,200 AFY) of combined surface and groundwater extractions to augment surface water diversions. Annual Lytle Creek flows from 1999 to 2018 based on United States Geological Survey (USGS) data are shown in Figure 4. USGS data from a Lytle Creek gaging station⁷ in the vicinity and upstream of FWC's diversion and intake facilities was used to determine the annual Lytle Creek flows. Based on USGS data, recent drought periods occurred from 1999 to 2004, 2007 to 2009, and 2012 to 2018. Pursuant to FWC's 2015 UWMP, and based on historical diversions during normal rainfall years, FWC's projected water supplies from Lytle Creek during normal rainfall years are estimated at approximately 5,700 AFY over the next twenty years. FWC's 2015 UWMP estimates that Lytle Creek projected surface water supplies could be reduced by 70 percent (to 1,710 AFY) in single dry or multiple dry years.

⁷ <https://waterdata.usgs.gov/nwis>

FIGURE 4 HISTORICAL LYTLE CREEK FLOWS (1999 – 2018)



Source: USGS 11062000 (Lytle C NR Fontana CA) gauge station

LYTLE BASIN

FWC can pump and divert more than 18,800 AFY of groundwater from the Lytle Basin. The Lytle Basin is subject to changes in groundwater elevation depending on rainfall, snowpack, and stormwater runoff. This was demonstrated after the significant rainfall received during 1993 and 2010. In the months following a series of storms during those very wet years, basin static water levels increased as much as 200 feet in three months. However, basin static water levels could likewise decrease and thus affect groundwater production during sustained dry years. Pursuant to FWC’s 2015 UWMP, and based on historical production during normal rainfall years, FWC’s projected water supplies from the Lytle Basin during normal rainfall years are

estimated at 9,400 AFY over the next twenty years. FWC's 2015 UWMP estimates that Lytle Basin projected groundwater supplies could be reduced by 20 percent (to 7,520 AFY) in multiple dry years.

CHINO BASIN

FWC's average annual production from the Chino Basin from 1999 to 2018 was approximately 15,665 AFY. During the most recent five years, FWC's annual production ranged from approximately 10,640 AFY to 16,299 AFY. According to IEUA's 2015 UWMP, total groundwater production in IEUA's service area in a normal year is estimated to be 137,500 AFY through fiscal year 2039-40 (see Table 6). The Chino Basin Judgment authorizes FWC to produce all the water it requires from the Chino Basin for beneficial use by FWC's customers, subject to replenishment requirements, and more than ample water is present in the Chino Basin to allow FWC to do so. FWC will construct additional wells and associated infrastructure in the Chino Basin to match additional water supply with additional water demands from growth in the number of customers. Because of groundwater contamination in the Chino Basin from nitrate and perchlorate, production of groundwater from affected wells may be interrupted until wellhead treatment is installed. FWC has the necessary technical and financial resources available to allow FWC to quickly respond to any such water quality incidents to assure continuity and reliability of water service. FWC's Wells F17B, F17C, F21B, and F23A, which pump from the Chino Basin, currently have perchlorate treatment equipment, which removes perchlorate from these sources. FWC plans to utilize best available treatment technologies to install additional treatment and drill replacement wells as needed to meet its water supply needs.

RIALTO BASIN

FWC and other pumpers subject to the 1961 Rialto Basin Decree are authorized to pump from the Rialto Basin without limitation, although extractions for any given year may be curtailed depending on groundwater elevations in three key wells during March, April, and May of each year. However, in order to maintain water levels in the Rialto Basin, a preliminary injunction was issued in February 2015, which limits FWC's groundwater production from Rialto Basin to 2,520 AFY. FWC's historical total groundwater production from the Rialto Basin is shown in Table 10.

TABLE 10 HISTORICAL ANNUAL PRODUCTION FROM THE RIALTO BASIN (AFY)

Year	Production by FWC
1999	2,935
2000	3,552
2001	6,106
2002	9,452
2003	9,321
2004	8,173
2005	7,252
2006	5,695
2007	7,325
2008	6,312
2009	8,480
2010	7,782
2011	6,386
2012	6,306
2013	7,358
2014	7,347
2015	2,728
2016	2,563
2017	2,378
2018	2,679

NO-MAN’S LAND BASIN

FWC and Fontana Union hold senior appropriative pumping rights to produce groundwater from the No-Man’s Land Basin. The United States Bankruptcy Court confirmed Plan of Reorganization for Fontana Union allocated groundwater production from this basin and water production restrictions are not applicable. FWC’s groundwater production from the No-Man’s Land Basin from 2009 to 2018 has averaged approximately 4,167 AFY. FWC’s annual production of approximately 4,000 AFY is estimated to be available from 2020 to 2040.

RECYCLED WATER

Achieving maximum use of all available recycled water is one of FWC’s and IEUA’s water management goals. Recycled water is used for groundwater recharge and storage as well as direct use by customers who are equipped and able to use recycled water. As shown in Table 2, FWC began using recycled water supplies within its service area in 2016 (with a recycled

water demand of 163 AF in 2018). FWC strongly supports the use of recycled water and will provide recycled water to its customers who are able to use it when it is made available. FWC has undertaken a project with the City of Fontana for the direct use of recycled water in the southern portion of FWC's service area known as the 1158 Zone. This project will provide up to approximately 2,000 AFY of recycled water within the City of Fontana to schools, parks, and commercial customers as part of a multi-phased program. As part of an existing agreement with IEUA, the City of Fontana is entitled to approximately 12,000 AFY of tertiary treated recycled water. FWC has designed and is constructing recycled water distribution system facilities in the 1158 Zone to meet those needs. Recycled water will be provided by IEUA's Regional Water Recycling Plant 4. In addition, facilities also will be required to distribute recycled water from IEUA to FWC's customers beyond the 1158 Zone. Those additional facilities will include pipelines, booster stations and reservoirs. In 2015, FWC entered into separate agreements with IEUA, the California Speedway Corporation (Speedway), and California Steel Industries (CSI) in which FWC will deliver recycled water supplies from IEUA to the Speedway and CSI. FWC will deliver up to 450 AFY of recycled water to the Speedway and up to 550 AFY of recycled water to CSI over an initial term of 60 years. In addition, IEUA will construct the recycled water transmission and distribution facilities to Speedway and CSI.

IEUA's "Recycled Water Three Year Business Plan", dated November 28, 2007, and "Draft Three Year Business Plan Update Fiscal Year 2010-11", dated September 28, 2010, projected the total additional recycled water use (for direct use and groundwater recharge) within IEUA's service area at approximately 50,000 AFY. IEUA projected supplying approximately 6,656 AFY of recycled water for distribution within the City of Fontana. IEUA identified potential recycled water users including schools, parks, and commercial customers, for irrigation and other uses. Pursuant to FWC's 2015 UWMP (and similarly in IEUA's 2015 UWMP), FWC is projected to use approximately 1,000 AFY of recycled water within its service area by 2020, with a gradual increase to approximately 3,000 AFY of recycled water by 2040. FWC's increased future use of recycled water for landscape and agricultural irrigation (including potential landscaping for proposed developments such as the Project), construction, industrial cooling, and groundwater recharge use, will offset the need for potable water use within FWC's service area. In the future, the Project could be connected to IEUA's regional recycled water line if there are sufficient recycled water demands in the area.

IMPORTED WATER SUPPLIES

As discussed previously, FWC can purchase untreated imported SWP water from SBVMWD and untreated imported water supplies from MWD (including Colorado River water, SWP water, water storage, and water transfers) through IEUA⁸. According to FWC's 2015 UWMP, FWC conservatively estimates it will receive up to 12,000 AFY of SWP water from IEUA and up to 2,000 AFY of SWP water from SBVMWD over the next twenty years. FWC has the capacity to purchase additional imported SWP water from IEUA and SBVMWD if needed to meet current and future water demands reported in the FWC's 2015 UWMP.

COLORADO RIVER WATER

In addition to obtaining water from the SWP, MWD obtains water from the Colorado River. MWD owns and operates the Colorado River Aqueduct which conveys water from Lake Havasu on the Colorado River to water transmission pipelines and to Lake Matthews for storage. MWD's Colorado River water right includes a fourth and fifth priority under the 1931 Seven Party Agreement relating to California's share in the Colorado River water supply. In 1964 a United States Supreme Court decree (*Arizona v. California*) limited California to 4.4 million AF per year from the Colorado River plus any available surplus water. An amount of 550,000 AF was allotted to California under the fourth priority right and an amount of 662,000 AF was allotted to California under the fifth priority right. MWD can receive water under the fifth priority right when the United States Secretary of the Interior determines that there is a surplus of water or if Arizona or Nevada does not use all of their allocated water.

Under a 2007 agreement reached by the seven States of the Colorado River Basin, if Lake Mead's level drops to 1,075 feet, an official shortage would be declared. That declaration would trigger cuts in water deliveries to Arizona and Nevada. During 2019, the seven States of the Colorado River Basin developed two drought contingency plans: the Upper Basin Drought Contingency Plan (Upper Basin DCP) and the Lower Basin Drought Contingency Plan (Lower Basin DCP). The Upper Basin DCP is designed to: a) protect critical elevations at Lake Powell and help assure continued compliance with the 1922 Colorado River Compact, and b) authorize

⁸ FWC has an additional existing standby connection with IEUA to receive untreated water from MWD at its Plant F43.

storage of conserved water in the Upper Basin that could help establish the foundation for a Demand Management Program that may be developed in the future. The Lower Basin DCP is designed to: a) require Arizona, California and Nevada to contribute additional water to Lake Mead storage at predetermined elevations, and b) create additional flexibility to incentivize additional voluntary conservation of water to be stored in Lake Mead. Under the Lower Basin DCP, the state of California is required to make the following annual DCP contribution based on projected January 1st Lake Mead elevations:

- Elevation above 1,040 feet and at or below 1,045 feet – 200,000 AF
- Elevation above 1,035 feet and at or below 1,040 feet – 250,000 AF
- Elevation above 1,030 feet and at or below 1,035 feet – 300,000 AF
- Elevation at or below 1,030 feet – 350,000 AF

STATE WATER PROJECT

The SWP is a water storage and delivery system maintained and operated by DWR. MWD holds a long-term contract with DWR for SWP water. MWD currently has a contractual ‘Table A’ amount of 1,911,500 AFY of SWP water (‘Table A’ represents the proportion of available SWP water allocated and delivered to each SWP contractor). The delivery reliability of SWP water is discussed below.

The San Francisco Bay-Sacramento River Delta area (Bay-Delta) is a part of the SWP water delivery system. The reliability of the Bay-Delta to deliver water may be impacted by potential risks associated with endangered species, earthquakes, levee failure, and climate change. In order to mitigate these potential risks, State and federal resources and environmental protection agencies and a broad range of stakeholders are involved in a multiyear planning process referred to as the CALFED process to develop programs to greatly improve the capacity and reliability of the SWP and the environmental conditions of the Bay-Delta. The Bay-Delta cooperating agencies approved a Record of Decision in August 2000 for a Programmatic Environmental Impact Report/Impact Statement (EIR/EIS) for a multi-year improvement program. The improvement program includes projects related to DWR’s SWP conveyance

capacity, water quality, and operation of the SWP. Those programs are undergoing thorough environmental review and public input is required.

The Bay Delta Conservation Plan (BDCP) grew out of the CALFED Bay-Delta Plan's Ecosystem Restoration Program Conservation Strategy. A draft BDCP was prepared through a collaboration of state, federal, and local water agencies, state and federal fish agencies, and a broad range of stakeholders. The BDCP identifies conservation strategies, water flow, and habitat restoration actions in California's Sacramento-San Joaquin Delta. The goal of the BDCP is to provide for both species/habitat protection and improved reliability of water supplies. During the extensive environmental review period for the BDCP, State and Federal agencies proposed that the California WaterFix Project replace the proposed BDCP as the State's proposed project. The California WaterFix Project consists of new water conveyance facilities with three new diversion points in the north Delta, Delta tunnel conveyance and ancillary facilities, operational elements, and habitat restoration and other environmental commitments. The California WaterFix Project was evaluated in a partially Recirculated Draft BDCP, EIR/EIS published on July 10, 2015. In December 2016, the Final EIR/EIS was made available to the public. This Final EIR/EIS has been certified as complying with CEQA as required under Section 15090, subd. (a)(1) of the CEQA Guidelines. The Final EIR/EIS describes the alternatives, discusses potential environmental impacts, and identifies mitigation measures that would help avoid or minimize impacts. It also provides responses to all substantive comments received on the 2013 Draft EIR/EIS and 2015 partially Recirculated Draft EIR/Supplemental Draft EIS. The BDCP is intended to meet the standards of the Sacramento-San Joaquin Delta Reform Act of 2009, described in the paragraph below. On July 21, 2017, DWR certified the Final EIR, adopted the CEQA Findings and a Statement of Overriding Considerations, adopted the Mitigation Monitoring and Reporting Program, approved the California WaterFix, and filed the Notice of Determination (NOD) with the Governor's Office of Planning and Research for the California WaterFix project, which includes the three new diversion points in the north Delta, Delta tunnel conveyance and ancillary facilities, operational elements, and habitat restoration and other environmental commitments. The Record of Decision (ROD) for the California WaterFix project has not yet been issued by the U.S. Bureau of Reclamation. Because no ROD has been issued, and the U.S. Bureau of Reclamation (Reclamation) has yet to issue its decision on

selecting an alternative, Reclamation will continue to consider the effects of all alternatives as compared to one another. On July 17, 2018, DWR issued for public review under CEQA a California WaterFix Draft Supplemental EIR/EIS that evaluated proposed changes to conveyance facilities previously evaluated in the December 2016 Final EIR/EIS. Reclamation is now issuing the California WaterFix Draft Supplemental EIR/EIS, including alternatives comparison, in compliance with the National Environmental Policy Act (NEPA) and the Council on Environmental Quality NEPA regulations. Public review of Reclamation's California WaterFix Draft Supplemental EIR/EIS began on September 21, 2018 and closed on November 5, 2018. DWR and the 29 State Water Contractors (also known as the Public Water Agencies (PWAs)) agreed to enter into the process for amending the SWP Water Supply Contracts (Contracts) to confirm and supplement certain provisions for several water management actions including to provide flexibility in water transfers of SWP water among other PWAs; clarify terms of water exchanges of SWP water among PWAs; and address cost allocation for California WaterFix among PWAs. On October 26, 2018, DWR released a Draft SWP Water Supply Contract Amendments for Water Management and California WaterFix EIR for a 45-day public comment period ending December 10, 2018. In response to the catastrophic events caused by the Camp Fire, the comment period was extended by 30 days to January 9, 2019. DWR will prepare written responses to all oral and written comments received and will prepare a Final SWP Water Supply Contract Amendments for Water Management and California WaterFix EIR. The contract amendments will not be finalized and signed until the CEQA compliance process is complete.

The State of California enacted comprehensive legislation, including the Sacramento-San Joaquin Delta Reform Act of 2009 (California Water Code Division 35) which provided for an independent state agency, the Delta Stewardship Council. Pursuant to that act, the Delta Stewardship Council developed a comprehensive management plan that provides more reliable water supply for California and protects and enhances the Delta ecosystem (through development and implementation of a Delta Plan). The Delta Stewardship Council adopted a final Delta Plan in May 2013 which is the comprehensive long-term management plan for the Delta to improve statewide water supply reliability and to protect the Delta. Subsequently its 14 regulatory policies were approved by the Office of Administrative Law and became effective with legally-

enforceable regulations on September 1, 2013. The Delta Stewardship Council also adopted a Programmatic Environmental impact Report (PEIR) on the Delta Plan in May 2013. The PEIR evaluates the potential impact of the Delta Plan and identifies mitigation measures. The Delta Plan was amended on February 2016, September 2016, and again in April 2018 to include refined performance measures; an exemption for single-year water transfers to be considered as covered actions; recommendations for conveyance, storage and operations; and policy for setting priorities for State investments in Delta levees.

In June 2013, a lawsuit was filed by the State Water Contractors and others seeking to overturn the Delta Stewardship Council's adoption of the Delta Plan, promulgation of related regulations, and certification of the above referenced PEIR. The litigation brought by the State Water Contractors and others claims that the Delta Stewardship Council exceeded its authority under the Sacramento-San Joaquin Delta Reform Act of 2009 and failed to analyze impacts under CEQA, particularly foreseeable impacts of the Delta Plan on water supplies around the state. In May 2016, the Superior Court upheld the Delta Stewardship Council on the vast majority of issues, including that the Council used best available science in developing the Delta Plan. The Court also ruled that the Delta Plan's regulations promote improved water quality, its flow recommendations promote conditions for species recovery, it promotes risk reduction strategies, and its conservation measures promote reduced reliance on the Delta. The Court, however, invalidated the entire Delta Plan because of what it identified as inadequacies in the following areas:

- The lack of enforceable, quantifiable targets for achieving reduced Delta reliance, reduced harm from invasive species, restoring more natural flows and increased water supply reliability, and
- Inadequate "promotion" of conveyance options to improve the way water projects move water across the Delta.

In November and December 2016, the Delta Stewardship Council and other parties have appealed the Court's ruling, which means the invalidation of the Delta Plan has been stayed (placed on hold) pending further action by the Appellate Court until specified revisions are completed. The Delta Plan remains in force and project proponents with covered actions remain legally required to file consistency certifications with the Delta Stewardship Council.

Governor Jerry Brown announced the creation of the California EcoRestore program in April 2015, committing to restore more than 30,000 acres of Delta habitat, which will be implemented on an accelerated timeline independent of the proposed water conveyance facilities. This comprehensive suite of habitat restoration actions under the California EcoRestore program includes specific targets for floodplain, tidal and sub-tidal, managed wetlands, and fish passage improvements to benefit native fish species and a commitment to adaptive management.

DWR's "State Water Project Final Delivery Capability Report 2017" (2017 Report), dated March 2018, indicates that there is a 77 percent likelihood (74 percent in the 2015 State Water Project Final Delivery Capability Report) that more than 2,000 thousand acre-feet per year (taf/year) of Table A water will be delivered under current conditions. The 2017 Report incorporated future impacts on water deliveries as a result of climate change and potential limited pumping of the SWP to protect salmon, smelt, and other species in the Sacramento-San Joaquin Delta and Central Valley areas, including operational restrictions of the biological opinions issued by the U.S. Fish and Wildlife Service (USFWS) in December 2008 and the National Marine Fisheries Service (NMFS) in June 2009 governing the SWP and Central Valley Project (a Federal water storage and conveyance facility) operations. Subsequently, a U.S. District Court Judge remanded the biological opinions to the USFWS and NMFS for further review and analysis. The long-term impact of these issues cannot be fully quantified at this time. DWR plans to develop additional water supply facilities in order for the SWP to deliver contracted water beyond historical delivery quantities.

Imported Water from SBVMWD

FWC projects receiving up to 2,000 AFY of imported water supplies from SBVMWD. FWC expects to receive greater quantities of SWP water from SBVMWD as population and water use increase in the SBVMWD portion of FWC's service area.

The delivery reliability of SWP water from SBVMWD is similar to the previous discussion of SWP deliveries above. SBVMWD currently has a contractual 'Table A' amount of

102,600 AFY of SWP water. FWC's 2015 UWMP conservatively projects that it will receive up to 2,000 AFY of SWP water from SBVMWD in the next twenty years. Supplies from SBVMWD could be reduced by 50 percent in single or multiple dry years. SBVMWD anticipates storage of SWP water during normal and wet years for use, along with direct deliveries, during dry years. Imported water provided by SBVMWD will be treated at FWC's Sandhill Water Treatment Plant, which is discussed in the following section on imported water from IEUA.

Imported Water from IEUA

FWC's upgraded Sandhill Water Treatment Plant can treat imported water from IEUA and SBVMWD and local surface water from Lytle Creek. The Sandhill Water Treatment Plant, which has a capacity of up to 29 MGD, includes a 40 cfs connection with IEUA to receive untreated SWP water. FWC's 2015 UWMP conservatively assumed that FWC will receive up to approximately 12,000 AFY of SWP water from IEUA in the next twenty years. Imported water supplies will allow FWC flexibility in managing its water supply sources both short and long term, as well as in normal and dry years. Also, the upgraded Sandhill Water Treatment Plant allows FWC to treat and maximize the use of SWP supplies and turbid Lytle Creek storm water flows that could not be used in the past.

WATER SUPPLY SUMMARY

Based on the above discussion of the available water supply sources, FWC's water supply-demand balance in normal, single dry, and multiple dry years during the next twenty years are summarized in Tables 11, 12, and 13, respectively.

The Chino Basin is an important source of groundwater for FWC now and will continue to be in the future. In addition, the Chino Basin Watermaster's Optimum Basin Management Program will greatly increase the Chino Basin's reliability and safe yield through recharge of imported water, additional local storm water, and recycled water. FWC currently has a total pumping capacity from the Chino Basin of approximately 24,700 gpm. At the present time FWC

has five inactive wells in the Chino Basin (with a total pumping capacity of approximately 11,300 gpm or 18,200 AFY) which cannot be used because of high levels of perchlorate and nitrate contamination.

FWC is planning to restore most, if not all, of the lost pumping capacity in the Chino Basin through construction of additional wells or installing wellhead treatment on existing wells in the near future. FWC is also planning to replace existing aging and poor producing wells, which will result in a net increase in production over existing capacity. Additional well capacity will provide emergency water supply in case of interruptions of water service due to migration of contamination, loss of power, physical damage to electrical power supply equipment, or failure of a water transmission pipeline.

Tables 11, 12, and 13 show that the water supplies available to FWC will be sufficient to meet all present and future water supply requirements of the Project for the next twenty years (through 2040), including during single and multiple dry years.

TABLE 11 FWC’S FUTURE WATER SUPPLIES IN NORMAL YEARS (AFY) FOR THE PROJECT

Year	2020	2025	2030	2035	2040
Demands from 2015 UWMP¹	40,140	47,536	50,773	53,711	56,562
Additional Project Demands (Goodman Industrial Park Fontana III Project)²	69	69	69	69	69
Additional Project Demands (Southwest Fontana Logistics Center Project)²	104	104	104	104	104
Total FWC Projected Water Demands	40,313	47,709	50,946	53,884	56,735
Water Supplies³					
Surface Water	5,700	5,700	5,700	5,700	5,700
Lytle Basin	5,000	9,400	9,400	9,400	9,400
Chino Basin	10,093	10,589	13,326	15,764	18,115
Rialto Basin	2,520	2,520	2,520	2,520	2,520
No-Man’s Land Basin	4,000	4,000	4,000	4,000	4,000
Recycled Water	1,000	1,500	2,000	2,500	3,000
Imported Water from SBVMWD	2,000	2,000	2,000	2,000	2,000
Imported Water from IEUA	10,000	12,000	12,000	12,000	12,000
Total	40,313	47,709	50,946	53,884	56,735

Notes:

1) Demand projections reported in adopted FWC 2015 UWMP, Table 6-1.

2) Projected water demands are assumed to be in addition to water demands identified from FWC’s 2015 UWMP.

3) Water supplies reported in adopted FWC 2015 UWMP with the exception of Chino Basin. Totals from Chino Basin were adjusted in 2020 and thereafter to supply the additional demands from the proposed Project.

TABLE 12 COMPARISON OF FWC 2020 WATER SUPPLY AND DEMAND IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS (AFY) FOR THE PROJECT

Demand and Supply	Normal Year	Single Dry Year ²	Multiple Dry Years ²		
			Dry Year 1	Dry Year 2	Dry Year 3
Demands from 2015 UWMP¹	40,140	29,998	37,757	36,462	29,998
Additional Project Demands (Goodman Industrial Park Fontana III Project)³	69	52	65	63	52
Additional Project Demands (Southwest Fontana Logistics Center Project)³	104	78	98	94	78
Total FWC Projected Water Demands	40,313	30,128	37,920	36,619	30,128
Surface Water	5,700	1,710	1,710	1,710	1,710
Lytle Basin	5,000	5,000	4,000	4,000	4,000
Chino Basin	10,093	7,398	16,190	14,889	8,398
Rialto Basin	2,520	2,520	2,520	2,520	2,520
No-Man's Land Basin	4,000	4,000	4,000	4,000	4,000
Water Supplies⁴ Recycled Water	1,000	1,000	1,000	1,000	1,000
Imported Water from SBVMWD	2,000	1000	1,000	1,000	1,000
Imported Water from IEUA	10,000	7,500	7,500	7,500	7,500
Total	40,313	30,128	37,920	36,619	30,128

Notes:

- 1) Demand projections reported in adopted FWC 2015 UWMP, Table 6-1.
- 2) Single Dry Year and Multiple Dry Year projections included in adopted FWC 2015 UWMP, Table 6-2.
- 3) Projected water demands are assumed to be in addition to water demands identified from FWC's 2015 UWMP.
- 4) Water supplies reported in adopted FWC 2015 UWMP with the exception of Chino Basin. Totals from Chino Basin were adjusted to supply the additional demands from the proposed Project. Based on FWC's 2015 UWMP, it is estimated that a single dry year water demand is about 25% lower than a normal year demand, dry year 1 water demand is about 6% lower than a normal year demand, dry year 2 demand is about 9% lower than a normal year demand, and dry year 3 demand is about 25% lower than a normal year demand.

TABLE 13 COMPARISON OF FWC’S 2040 WATER SUPPLY AND DEMAND IN NORMAL, SINGLE DRY, AND MULTIPLE DRY YEARS (AFY) FOR THE PROJECT

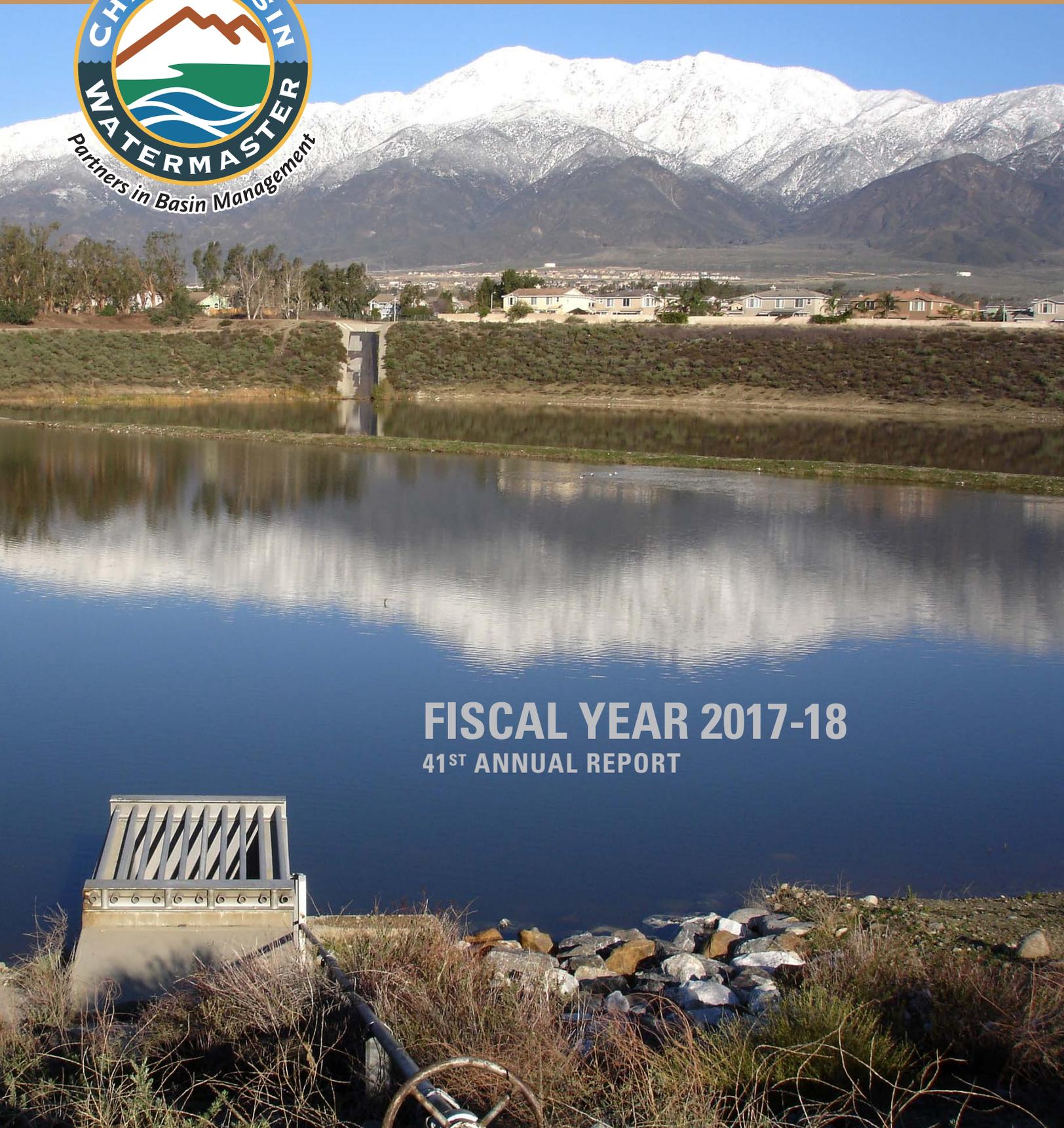
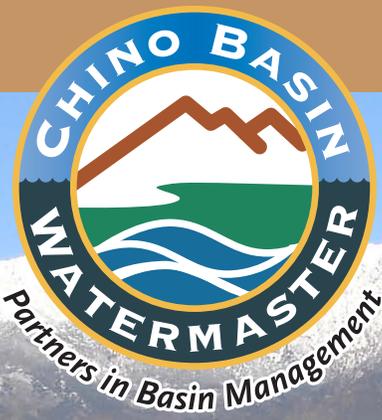
Demand and Supply	Normal Year	Single Dry Year ²	Multiple Dry Years ²		
			Dry Year 1	Dry Year 2	Dry Year 3
Demands from 2015 UWMP¹	56,562	42,271	53,204	51,379	42,271
Additional Project Demands (Goodman Industrial Park Fontana III Project)³	69	52	65	63	52
Additional Project Demands (Southwest Fontana Logistics Center Project)³	104	78	98	94	78
Total FWC Projected Water Demands	56,735	42,401	53,367	51,536	42,401
Surface Water	5,700	1,710	1,710	1,710	1,710
Lytle Basin	9,400	9,400	7,520	7,520	7,520
Chino Basin	18,115	11,771	24,617	22,786	13,651
Rialto Basin	2,520	2,520	2,520	2,520	2,520
No-Man’s Land Basin	4,000	4,000	4,000	4,000	4,000
Recycled Water	3,000	3,000	3,000	3,000	3,000
Imported Water from SBVMWD	2,000	1,000	1,000	1,000	1,000
Imported Water from IEUA	12,000	9,000	9,000	9,000	9,000
Total	56,735	42,401	53,367	51,536	42,401

Notes:

- 1) Demand projections reported in adopted FWC 2015 UWMP, Table 6-1.
- 2) Single Dry Year and Multiple Dry Year projections included in adopted FWC 2015 UWMP, Table 6-2.
- 3) Projected water demands are assumed to be in addition to water demands identified from FWC’s 2015 UWMP.
- 4) Water supplies reported in adopted FWC 2015 UWMP with the exception of Chino Basin. Totals from Chino Basin were adjusted to supply the additional demands from the proposed Project. Based on FWC’s 2015 UWMP, it is estimated that a single dry year water demand is about 25% lower than a normal year demand, dry year 1 water demand is about 6% lower than a normal year demand, dry year 2 demand is about 9% lower than a normal year demand, and dry year 3 demand is about 25% lower than a normal year demand.

APPENDIX A

APPENDIX B



FISCAL YEAR 2017-18

41ST ANNUAL REPORT

PARTNERSHIPS AND SOLUTIONS FOR A SUSTAINABLE FUTURE

HISTORY OF TOTAL ANNUAL GROUNDWATER PRODUCTION FROM THE CHINO BASIN (ACRE-FEET)

Production Year	Appropriative Pool ¹³	Agricultural Pool ¹³	Non-Agricultural Pool ¹³	Chino Basin Desalters ¹⁴	Department of Toxic Substances Control ¹⁵	Total Production ¹⁶
77-78	62,408	91,714	10,102 ¹	-	-	164,224
78-79	61,372	81,479	7,263	-	-	150,114
79-80	65,371	70,050	7,541	-	-	142,961
80-81	71,443	67,726	5,777	-	-	144,945
81-82	66,844	64,032	5,801	-	-	136,676
82-83	63,557	56,858	2,448	-	-	122,864
83-84	70,544	60,076	3,258	-	-	133,877
84-85	76,903	54,248	2,446	-	-	133,598
85-86	80,885	50,611	3,255	-	-	134,751
86-87	84,662	57,964	2,696	-	-	145,322
87-88	91,579 ²	55,949	3,018	-	-	150,545
88-89	93,617 ³	45,683	3,692	-	-	142,992
89-90	101,344 ⁴	47,358	4,927	-	-	153,629
90-91	86,513 ⁵	47,011	5,479	-	-	139,003
91-92	91,736 ⁶	43,456	4,900	-	-	140,092
92-93	86,584 ⁷	44,300	5,226	-	-	136,110
93-94	80,934 ⁸	44,492	4,322	-	45	129,793
94-95	93,608 ⁹	55,415	4,091	-	45	153,159
95-96	103,729 ¹⁰	43,639	3,240	-	60	150,668
96-97	112,205	44,923	3,779	-	76	160,983
97-98	99,810 ¹¹	43,370	3,274 ¹²	-	83	146,537
98-99	111,048	47,792	3,734	-	81	162,655
99-00	128,892	44,242	5,605	-	82	178,821
00-01	116,204	39,285	5,991	7,989	100	169,570
01-02	123,531	38,196	4,150	9,458	81	175,416
02-03	121,748	35,168	3,979	10,439	79	171,413
03-04	125,320	38,192	2,057	10,605	79	176,253
04-05	118,030	31,505	2,246	9,854	81	161,715
05-06	107,249	30,253	2,641	16,542	80	156,765
06-07	119,438	29,653	3,251	27,077	79	179,498
07-08	120,650	23,539	3,421	30,121	81	177,813
08-09	134,119	23,277	2,420	29,012	83	188,910
09-10	117,299	21,043	2,039	28,857	85	169,323
10-11	99,172	21,030	1,986	29,043	87	151,319
11-12	93,615	22,319 ¹⁷	3,162	28,411	89	147,595
12-13	109,294	23,718 ¹⁷	3,686	27,098	87	163,883
13-14	113,976	21,796 ¹⁷	3,834	29,282	85	168,973
14-15	97,842	17,118 ¹⁷	3,371	30,022	84	148,436
15-16	100,297	17,109 ¹⁷	2,670	28,191	85	148,352
16-17	93,699	17,715 ¹⁷	3,636	28,284	104	143,438
17-18	88,740	18,857	2,919	30,088	83	140,687

* Total Production adjusted from prior annual reports to include previously omitted production from wells that have become non-active over time.

¹ Includes 3,945 AF of mined water pumped by Edison as agent for IEUA.

² Does not include 7,674.3 AF exchanged with MWDSC.

³ Does not include 6,423.6 AF exchanged with MWDSC.

⁴ Does not include 16,377.1 AF exchanged with MWDSC.

⁵ Does not include 14,929.1 AF exchanged with MWDSC.

⁶ Does not include 12,202.4 AF exchanged with MWDSC.

⁷ Does not include 13,657.3 AF exchanged with MWDSC.

⁸ Does not include 20,194.7 AF exchanged with MWDSC.

⁹ Does not include 4,221.9 AF exchanged with MWDSC.

¹⁰ Does not include 6,167.2 AF exchanged with MWDSC.

¹¹ Does not include 4,275.4 AF exchanged with MWDSC.

¹² Does not include 216.5 AF exchanged with MWDSC.

¹³ Represents total physical production by Pools, not assessed production.

¹⁴ Production by the Chino Basin Desalters is not considered assessable production. Desalter replenishment obligation accounting is shown in the Assessment Package.

¹⁵ Production by DTSC is accounted separately, by agreement, such that the production is not assessed by Watermaster.

¹⁶ Total reflects physical production by pumpers and does not account for any adjustments that are made in the Assessment Packages.

¹⁷ Total Agricultural Pool production revised due to incorrect multiplier used on an irrigation well meter.