

APPENDIX F

Water Supply Assessment

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SB 610 & SB 221
McCabe Ranch II Tract Map 994
Specific Plan Update

For: Imperial County Planning and Development Services
801 Main Street, El Centro, CA 92243

Dubose Design Group

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DRAFT

McCabe Ranch II Tract Map 994

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Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: IID Equitable Distribution Plan

Acronyms

ACC	All American Canal
AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet per Year
AWWA	American Water Works Association
AOP	Annual Operations Plan
APN	Assessor's Parcel Number
Applicant	McCabe Ranch Realty, LLC
CAP	Central Arizona Project
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CMC	Central Main Canal
CRWDA	Colorado River Water Delivery Agreement
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
CWC	California Water Code
EDP	IID Equitable Distribution Plan
EDU	Equivalent Dwelling Units
EIS	Environmental Impact Statement
GPD	Gallons Per Day
HPUD	Heber Public Utility District
ICGP	Imperial County General Plans Area
ICPDS	Imperial County Planning and Development Services
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IOPP	Inadvertent Overrun Payback Policy
ISG	Interim Surplus Guidelines
IRWMP	Integrated Regional Water Management Plan
IWSP	Interim Water Supply Policy
KAF	Thousand Acre Feet
LAFCO	Local Agency Formation Commission
LCR	Lower Colorado Region
LCRWSP	Lower Colorado Water Supply Project
MCI	Municipal, commercial, industrial
MGD	Million Gallons per Day
MSL	Mean Sea Level
MW	Megawatt
MWD	Metropolitan Water District of Southern California
NAF	Naval Air Facility
NPDES	National Pollution Discharge Elimination System
PDWF	Peak Dry Weather Flow
Project	McCabe Ranch II Tract Map 994
PPWR	Present Perfected Water Rights
PSI	Per Square Inch
PVID	Palo Verde Irrigation District
PWWF	Peak Wet Weather Flow
QSA/	Quantification Settlement Agreement and Related Agreements Transfer Agreements
SAP	Service Area Plan
SB	Senate Bill
SB 610	Senate Bill 610
SB 221	Senate Bill 221
SDCWA	San Diego County Water Authority
SNWA	Southern Nevada Water Authority

TLCFP	Temporary Land Conversion Fallowing Policy
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
USGS	U.S. Geological Survey
UWMP	Urban Water Management Plan
UWMPA	Urban Water Management Plan Act
WDR	Wastewater Discharge Requirements
WEF	Water Environment Federation
WSA	Water Supply Assessment
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

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Purpose of Water Supply Assessment

This Water Supply Assessment (WSA) was prepared for the **County of Imperial** by Dubose Design Group LLC, regarding McCabe Ranch II Tract Map 994, Specific Plan Update proposed by McCabe Ranch Realty. This study is a requirement of California law, specifically Senate Bill 610 (SB 610). SB 610 is an act that amended Section 21151.9 of the Public Resources Code, and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code. SB 221 is an act that amended Section 11010 of the Business and Professions Code, while amending Section 65867.5 and adding Sections 66455.3 and 66473.7 to the Government Code. SB 610 was approved by the Governor and filed with the Secretary of State on October 9, 2001, and became effective January 1, 2002.¹ SB 610 requires a lead agency, to determine that a project (as defined in CWC Section 10912) subject to California Environmental Quality Act (CEQA), to identify any public water system that may supply water for the project and to request the applicants to prepare a specified water supply assessment.

This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California's cities, farms and rural communities with adequate water supplies.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in California Water Code (CWC) Section 10912 [a]) that are subject to the California Environmental Quality Act (CEQA). Due to increased water demands statewide, this water bill seeks to improve the link between information on water availability and certain land use decisions made by cities and counties. This bill takes a significant step toward managing the demand placed on California's water supply. It provides further regulations and incentives to preserve and protect future water needs. Ultimately, this bill will coordinate local water supply and land use decisions to help provide California's cities, farms, rural communities and industrial developments with adequate long-term water supplies. The WSA will allow the lead agency to determine whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

Project Determination According to SB 610 - Water Supply Assessment

With the introduction of SB 610, any project under the California Environmental Quality Act (CEQA) shall provide a Water Supply Assessment if the project meets the definition of CWC § 10912. Water Code section 10911(c) requires for that the lead agency "determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses." Specifically, Water Code section 10910(c)(3) states that "If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water

¹SB 610 amended Section 21151.9 of the California Public Resources Code, and amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the Water Code. SB 610 was approved by California Governor Gray Davis and filed with the Secretary of State on October 9, 2001.

demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses."

After review of CWC § 10912 (a)(1) & CWC § 10912 (b), it was determined that the proposed McCabe Ranch II Tract Map 994 & Specific Plan, is deemed a project as it is subject to both a residential project use that will more than 500 dwelling units and will impact a public water system that has fewer than 5,000 service connections industrial development that would account for an increase of 10 percent or more in the number of the public water system's existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system's existing service connections.

In addition, this assessment shall include and quantify water received in prior years from existing (1) water supply entitlements; (2) water rights; and (3) water service contracts held by Water Supplier. These must be demonstrated by (a) written contracts; (b) capital outlay/financing program for delivery adopted by Water Supplier; (c) Fed/State/Local permits for delivery infrastructure; (d) regulatory approvals required to convey or deliver water.

Senate Bill 221 (SB 221) (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers, cities and counties. Both statutes require detailed information regarding water availability to be provided to the Board of Supervisors and other county agencies and decision makers prior to the approval of specific large development, such as McCabe Ranch II Tentative Map 994, amendment to McCabe Ranch II Specific Plan. Its important to note that the McCabe Ranch II Specific Plan has been analyzed and has been accounted for in the Service area plan in its first adoption in 2008, 2008, (Tract Map 994 is within the McCabe Ranch Specific Plan Area).

Executive Summary

The Imperial County in coordination with Imperial Irrigation District & Heber Utility District (HPUD) has requested a WSA as part of the environmental review for the proposed McCabe Ranch II Tract Map 994 Specific Plan Update (“Project”). This study is intended for use by Imperial County & Heber Public Utility District and Imperial Irrigation District in its evaluation of water supplies for existing and future land uses. The evaluation examines the following water elements:

Water availability during a normal year

Water availability during a single dry year, and multiple dry water years

Water availability during a 20-year projection to meet existing demands

Expected 20-year water demands of the Project

Reasonably foreseeable planned future water demands to be served by the Imperial Irrigation District under Equitable Distribution Plan apportionment

The proposed Project site is located on 351.2-Acre portion of the 468-acre McCabe Ranch II Specific Plan Area located in the general area north of the townsite of Heber and south of the City of El Centro, in the County of Imperial, California. The McCabe Ranch II Tract 994 Project site is bounded by McCabe Road on the north, Dogwood Road on the east, State Route 86 (SR-86) on the west and the western extension of Correll Road on the south. The proposed Tract Map is bisected by the Imperial Irrigation Districts Date Drain No. 3 and Dogwood Canal and is located in Section 20, Range 14 East, Township 16 South San Bernadino Base Meridian within the U.S. Geological Survey (USGS) Heber, California 7.5- minute topographic map. The project is within IID’s Imperial Unit and district boundary and as such is eligible to receive water service through HPUD. Water infrastructure capacity is not a part of this assessment **McCabe Ranch II Tract Map 994** is responsible for contacting IID Water Engineering Department for an infrastructure capacity assessment. Any infrastructure improvements, costs and environmental compliance associated with improvements to accommodate the Project’s water supply or for the conservation of the water supply needed for the Project is the sole responsibility of **McCabe Ranch II Track Map 994**.

IID adopted an Interim Water Supply Policy (IWSP) in 2009 for new Non-Agricultural Projects, under which water supplies may be contracted to serve new developments within IID’s water service area. For applications processed under the IWSP, applicants shall be required to pay a processing fee and, after IID board approval of the corresponding water supply agreement, will be required to pay a reservation fee(s) and annual water supply development fees. The water supply development fees are collected for the development of water supply projects, such as water conservation projects, water storage projects and/or water augmentation projects.

Under the IWSP, IID may set aside up to 25,000 acre-feet annually (AFY) of IID’s Colorado River water supply to serve new non-agricultural projects with water created from IID efficiency conservation projects and programs. As of [January 2025](#), a balance of 18,620 AFY remains available under the IWSP for new non-agricultural projects, providing a mechanism for the development of reasonably sufficient water supplies for such projects. The proposed Project water demand of approximately 4 AFY represents .99 % of the annual unallocated supply that may be created and set aside for new non-agricultural projects.

The **Heber Public Utility District** anticipates non-agricultural project water supply demand within their jurisdiction, as the land use authority, is not likely to exhaust the 18,620 AFY available under the IWSP within the foreseeable 20-year planning period. Thus, the proposed Project’s estimated water demand, combined with other developments

anticipated in the area, is unlikely to adversely affect IID's ability to provide water to other users in IID's water service area unless mitigation is incorporated. This industrial water use project will need to enter into a water supply agreement with IID under which water conservation and/or augmentation commitments will be required of **McCabe Ranch II Tract Map 994**.

IID has a proven record of successful development and implementation of water conservation programs and projects in response to fully executed water supply agreements with public and private entities for water conservation efforts that are fully funded by the party requesting the conserved water supply. The District will continue to meet all existing and new water supply and conservation agreement obligations consistent with the terms and conditions set forth in those agreements, including any environmental requirements and cost provisions.

In efforts to address any potential water supply/demand imbalances, IID adopted a revised Equitable Distribution Plan for the apportionment of water to all water user categories including for commercial/industrial water uses such as the proposed Project. Implementation of the EDP initiates every January 1st and continues throughout the year unless the IID Board of Directors takes specific action. The latest revisions to the EDP were made in [July of 2023 \(IID EDP\)](#). Under the EDP, water supplies may be restricted to **McCabe Ranch II Tract Map 994** as described under the IID Water Supply & Demand Section, Equitable Distribution Plan sub-section of this WSA.

In June 2022, U.S. Bureau of Reclamation Commissioner Camille Touton testified before a congressional committee and called for the Basin states to develop a plan before the end of the year to reduce demands by 2-4 million acre-feet per year, through 2026, or the Secretary of the Interior would take regulatory action to force these reductions in order to protect the Colorado River system in light of the prolonged drought conditions.

In 2023, California submitted a voluntary conservation proposal to Reclamation to conserve up to 400,000 AFY through 2026 as their commitment to Lake Mead and the Colorado River System. Post 2026, new operating guidelines would come into effect, potentially affecting all River contractors. IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community while simultaneously ramping up water conservation programs in an effort to augment local water supplies, to some degree, should Basin-wide cuts be unavoidable. In the interim, IID has entered into a System Conservation Implementation Agreement (SCIA) with the U.S. Bureau of Reclamation for its share of the California proposal under a voluntary plan that would not exceed 300,000 AFY (through 2026) and result in compensation from Reclamation for local water conservation efforts.

[IID's Lake Mead contributions for 2022, 2023 were 25,000 AF and 56,111 AF, respectively, which were over and above IID's transfer obligation schedule. For 2024 IID conserved an estimated 207,640 AF for Lake Mead above its transfer obligation schedule. Provisional conservation numbers indicate IID saved a total of 673,340 AF in 2024 for all commitments combined. Consequently, California's 2024 water use, are the lowest in decades and IID's, in particular, is the lowest since 1941. Despite these historic contributions, Lake Mead elevation had increased by only 17 feet by the end of 2024 and continues to operate under shortage conditions. It is unknown, as of April 2025, what post 2026 conservation measures may need to be considered by the District. Nonetheless, IID's conservation capacity remains reliable.](#)

Project Description

McCabe Ranch Realty LLC is proposing a housing tract map consisting of 351.2 of the 468-acre McCabe Ranch II Specific Plan Area. McCabe Ranch Realty, LLC (Applicant) is seeking to process a subdivision Tentative Map, referred to as the McCabe Ranch II Tract Map 994, for an approximately 351.2 acre portion of the McCabe Ranch II Specific Plan Area to accommodate the phased development of 1,610 residential units (Single and Multiple family units), a 12.3 acre elementary school site for McCabe Union School District, park, roadway, associated utilities, drainage, and stormwater treatment improvements. The **McCabe Ranch II Tract Map 994** Project site is an approximately 352.1-acre portion of the 468-acre McCabe Ranch II Specific Plan Area.

As previously stated, the proposed project is located on 351.2-Acre portion of the 468-acre McCabe Ranch II Specific Plan Area located in the general area north of the townsite of Heber and south of the City of El Centro, in the County of Imperial, California. The **McCabe Ranch II Tract Map 994** Project site is bounded by McCabe Road on the north, Dogwood Road on the east, State Route 86 (SR-86) on the west and the western extension of Correll Road on the south. The proposed Tract Map is bisected by the Imperial Irrigation Districts Date Drain No. 3 and Dogwood Canal and is located in Section 20, Range 14 East, Township 16 South San Bernadino Base Meridian within the U.S. Geological Survey (USGS) Heber, California 7.5-minute topographic map.

The **McCabe Ranch II Tract Map 994** (Project) is comprised of four (4) parcels, Assessor's Parcel Numbers (APNS), 054-130-072, 054-130-076, 054-130-077& 054-130-078. The Imperial Irrigation District's Date Drain No. 3, and Dogwood Canal both traverse the project area in a north-south direction. Development of the Tract Map will require an amendment to the **McCabe Ranch II Specific Plan**, annexation to the Heber Public Utilities District. The project owner intends to enter into a Development Agreement with the County of Imperial.

Surrounding Land Uses and Settings

The **McCabe Ranch II Tract Map 994** Project site is an approximately 351.2-acre portion of the 468-acre McCabe Ranch II Specific Plan Area (Specific Plan Area). The Specific Plan area is approximately 468-acres in size and is currently in multiple ownership. McCabe Ranch Realty, LLC is under ownership contract Tierra Partners, LLC of approximately 345 acres of the 468-acre total consisting of APNs 054-130-078, 054-130-072, 054-130-077, 054-130-076. The properties identified as APNs 054-130-079, and 054-130-042.

The Specific Plan Area consists of generally flat terrain with very gently topographic sloping to the northwest. The site elevation is approximately 19 to 23 feet below mean sea level (msl). The area is under various phases of active cultivation with agriculture crops and contains canals and drains that are utilized to transport water to and from the agricultural fields. One lateral canal (The Dogwood lateral) and one drain (Date Drain #3) traverse the area in north south direction. Adjacent to Date Drain #3 is an above ground utility line owned by the Imperial Irrigation District that serves the area. Adjacent both sides of the canal are unpaved access roads. The Date Drains #3-A runs in an east-west direction through the western half of the site in the approximate alignment of Black Hills Road.

Surrounding land uses include agricultural lands to the east and west of the Project site. There are several scattered single family residential structures to the northwest, northeast, and west. The residential subdivision known as "McCabe Ranch I Specific Plan" abuts the Project site on the south and east, and there is a small cluster of homes located along McCabe Road. The Heber Essential Services Facility housing, the HPUD, and the County Fire Department

are located approximately one mile to the south along the eastside of Dogwood Road. HPUD's water treatment plant is located east and south of the Heber Essentials Facility

Table 1 Existing Land Uses, Zone Classification and General Plan Designation

Direction	Existing Land Uses	Zoning	General Plan
Project Site	Agriculture	Mc Ra 2 SPA	Specific Plan
North	Agriculture and Residential	A-1-U and A-2-U	Urban Area
South	Agriculture and Residential	A-2-G-SPA	Specific Plan
East	Agriculture	A-2-SPA	Specific Plan
West	Agriculture	A-2	Agriculture

The Specific Plan Amendment affects only those parcels under the McCabe Ranch Realty LLC control.² Please refer to **Figure 1** for the Project's Regional Location (**Figure 1: Project Site Regional Location**), and **Figure 2** for the Project Site and Vicinity (**Figure 2: Aerial Map of Project Vicinity**).

In general, the project can be described as follow **Figure 4** for the conceptual project layout and tentative site plan.

Potable water services for the Project will be provided by Heber Public Utility District (HPUD). **be needed for this project** and be provided by the IID. Construction water will

The proposed Project owner will need to contract with IID to deliver up to 87 AFY of untreated water, via the Dogwood Lateral 2 Gate 18-A, Dogwood Lateral 2 Gate 15, Dogwood Lateral 2 Gate 12, Dogwood Lateral 2 Gate 14, Dogwood Lateral 2 Gate 17, Dogwood Lateral 2 Gate 43-A. The proposed Project is anticipated to use approximately 4 AFY necessary for periodic dust control and grading during the construction phases of the project. The 87-acre feet is a substantial decrease in the historic 10-year agricultural consumption, later referenced in this study.

² McCabe Ranch Specific Plan – Chapter 4 Resource Management Updated January 2025

Table 2: Detailed Development By Phase, McCabe Ranch II Tract Map 994

PROPOSED LAND USES		PHASE 1 (a)		PHASE 2 (a)		PHASE 3 (a)			TOTALS
		1A	1B	2A	2B	3A	3B	3C	
Development Year		2025 - 2026	2026 - 2027	2029 - 2031	2032 - 2033	2034 - 2035	2036 - 2037	2038 - 2039	
RESIDENTIAL DEVELOPMENT									DUs
Single-Family	Density								
Traditional Single Family	5 DU/AC	-0-	-0-	160	134	151	-0-	88	533
Small Lot Single-Family	7 DU/AC	-0-	157	100	-0-	-0-	-0-	-0-	257
Flex Lot Single-Family	9 DU/AC	157	-0-	-0-	-0-	-0-	88	-0-	245
Mini Estate	3 DU/AC	-0-	-0-	-0-	-0-	-0-	-0-	19	19
Estate Lot	2 DU/AC	-0-	-0-	-0-	25	-0-	-0-	-0-	25
Single-Family Subtotal		157	157	260	159	151	88	107	1,079
Multi-Family	Density								
Multi-Family 1 (NW Corner)	20 DU/AC	-0-	-0-	-0-	196	-0-	-0-	-0-	196
Multi-Family 2 (NE Corner)	19 DU/AC	-0-	-0-	-0-	-0-	-0-	335	-0-	335
Multi-Family 3	22 DU/AC	-0-	-0-	-0-	-0-	-0-	-0-	-0-	0
Multi-Family Subtotal		-0-	-0-	-0-	-0-	151	335	-0-	-0-
TOTAL RESIDENTIAL		157	157	260	355	151	423	107	1,610
NON - RESIDENTIAL DEVELOPMENT									Acres
McCabe Elementary (K-5) School Site		-0-	-0-	12.3	-0-	-0-	-0-	-0-	12.3
Commercial		-0-	-0-	-0-	-0-	-0-	-0-	3.14	-0-
Business Park		-0-	-0-	-0-	-0-	-0-	-0-	-0-	- 0 -
Park/Detention/Greenbelt (inc. IID Easement)		-0-	-0-	-0-	-0-	-0-	-0-	-0-	38.78
Major Collector Roads		-0-	-0-	-0-	-0-	-0-	-0-	-0-	48.3

Source: McCabe Ranch Realty, April 2024.

Notes: (a) Denotes property controlled by McCabe Ranch Realty, LLC. Included in TM 994.

DU = Dwelling Units.

AC = Acres

-0- = No development during this phase

Table 3 Summary Of Land Uses Within McCabe Ranch II Specific Plan Area ⁽¹⁾

Land Use	Approx. Gross Acres	% of Total Specific Plan Area	Dwelling Units
Residential Uses			
Traditional Lot – Single Family (5,000 SF+)	121.46	25.9	569
Small Lot – Single Family (4,000 SF – 5,000 SF)	58.02	12.4	406
Flex Lot – Single Family (2,000 SF – 4,000 SF)	65.54	14.0	482
Mini-Estate Lot – Single Family (9,000 SF+)	6.72	1.5	19
Estate Lot – Single Family (20,000 SF+)	19.85	4.2	25
Single Family Subtotal	271.59	58.0	1,501
Multi-Family 1 (Northwest Corner)	9.82	2.0	196
Multi-Family 2 (Northeast Corner)	17.57	3.8	335
Multi-Family 3	12.2	2.6	268
Multi-Family Subtotal	39.59	8.4	799
<i>Residential Uses Subtotal</i>	<i>311.18</i>	<i>66.4</i>	<i>2,300</i>
Non-Residential Uses			
Business Park	9.41	2.0	-0-
Commercial	3.14	0.7	-0-
Elementary School Site (McCabe)	12.3	2.6	-0-
Elementary School Site (Heber)	16.29	3.5	-0-
<i>Non-Residential Uses Subtotal</i>	<i>41.14</i>	<i>8.8</i>	
Open Spaces/Recreation			
Parks / Detention / Greenbelts (incl IID easement)	62.3	13.3	
<i>Open Space/Recreation Subtotal</i>	<i>62.38</i>	<i>13.3</i>	
<i>Major Collector Roads Subtotal</i>	<i>53.62</i>	<i>11.5</i>	
GRAND TOTAL	468.32	100	2,300

Notes: (a) Includes properties controlled by McCabe Ranch Realty, LLC. (McCabe Ranch II TM 994) as well as property under separate ownership (not controlled by McCabe Ranch Realty LLC).

Source: McCabe Realty, LLC, April 2024.

Water Use Efficiency Best Management Practice Incorporated into Project

The Project proposes to incorporate the following Best Management Practices for water use efficiency under the requested construction water supply amount of 4 AFY by minimizing the degradation of water quality through use of erosion control plans and best management practices. The project will be taking out agricultural land out of

production which result in less water demand than historically used over the last 10 years from the allotted amount

from IID. As reference above the Heber Public Utility Water District has already planned the water needs for the project through the service area plan, later explored in this study. The tract map is said to develop housing development with the most sustainable water features using the most recent technology implemented in the architectural design of each component of the tract map.

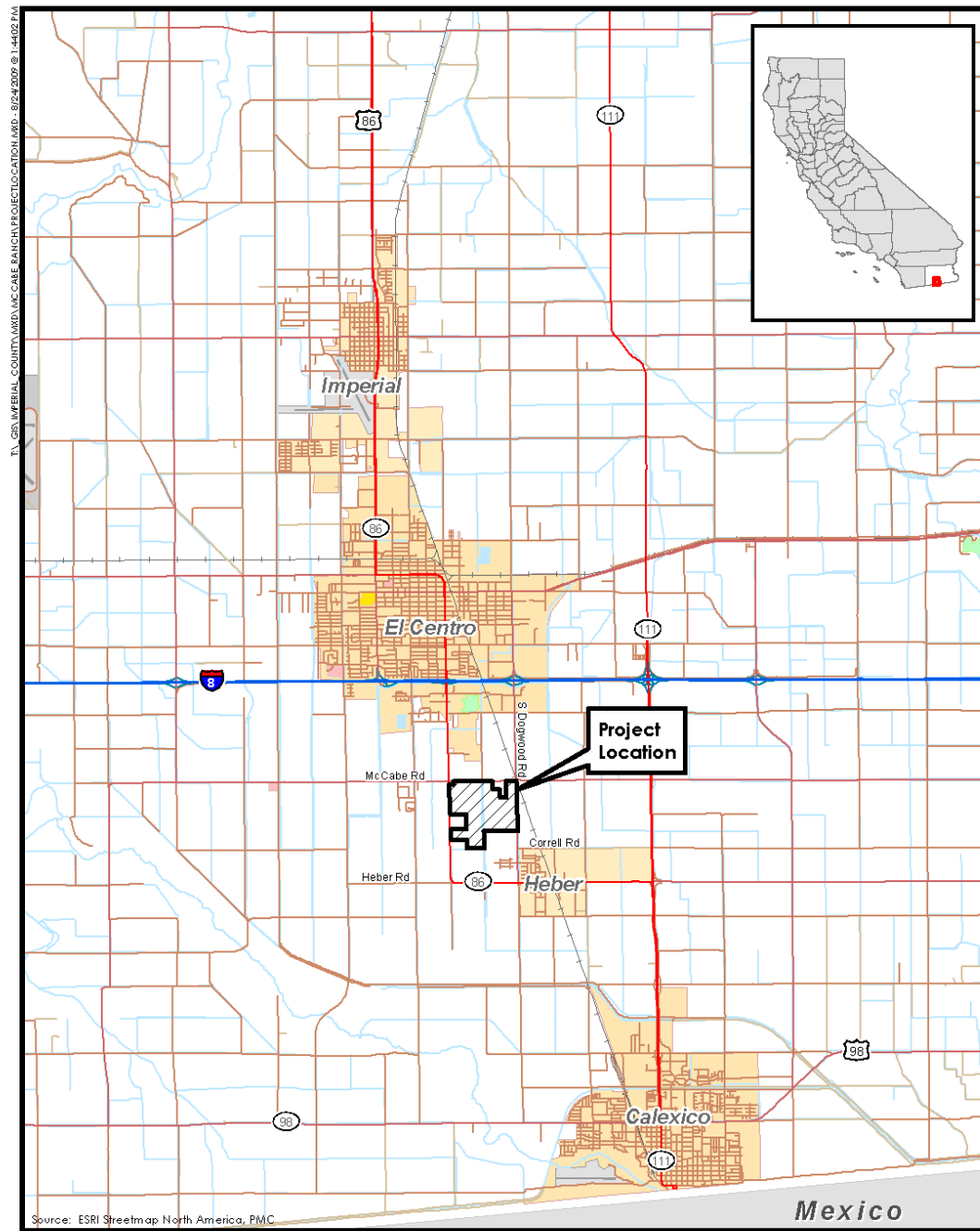
Additional Project Measures Under Potential Water Curtailment

Should reductions to IID's water supply be ordered or directed from a governmental authority having appropriate jurisdiction, **McCabe Ranch II Tract Map 994** may be required to reduce its water supply demand by a proportionate reduction of the total volume of water available to IID. Additionally, operational changes that may be implemented by the Project under these unpredictable conditions are as follows:

The project will be decreasing the amount of water historically being used for agricultural uses. The project will also be implementing water-efficient landscapes, installing water-efficient irrigation systems and devices such as soil moisture-based irrigation controls, design buildings to for water efficiency with fixtures and appliances for water slow flow. The project is also subject to any water efficiency measure that HPUD may implement as a result of climate change.

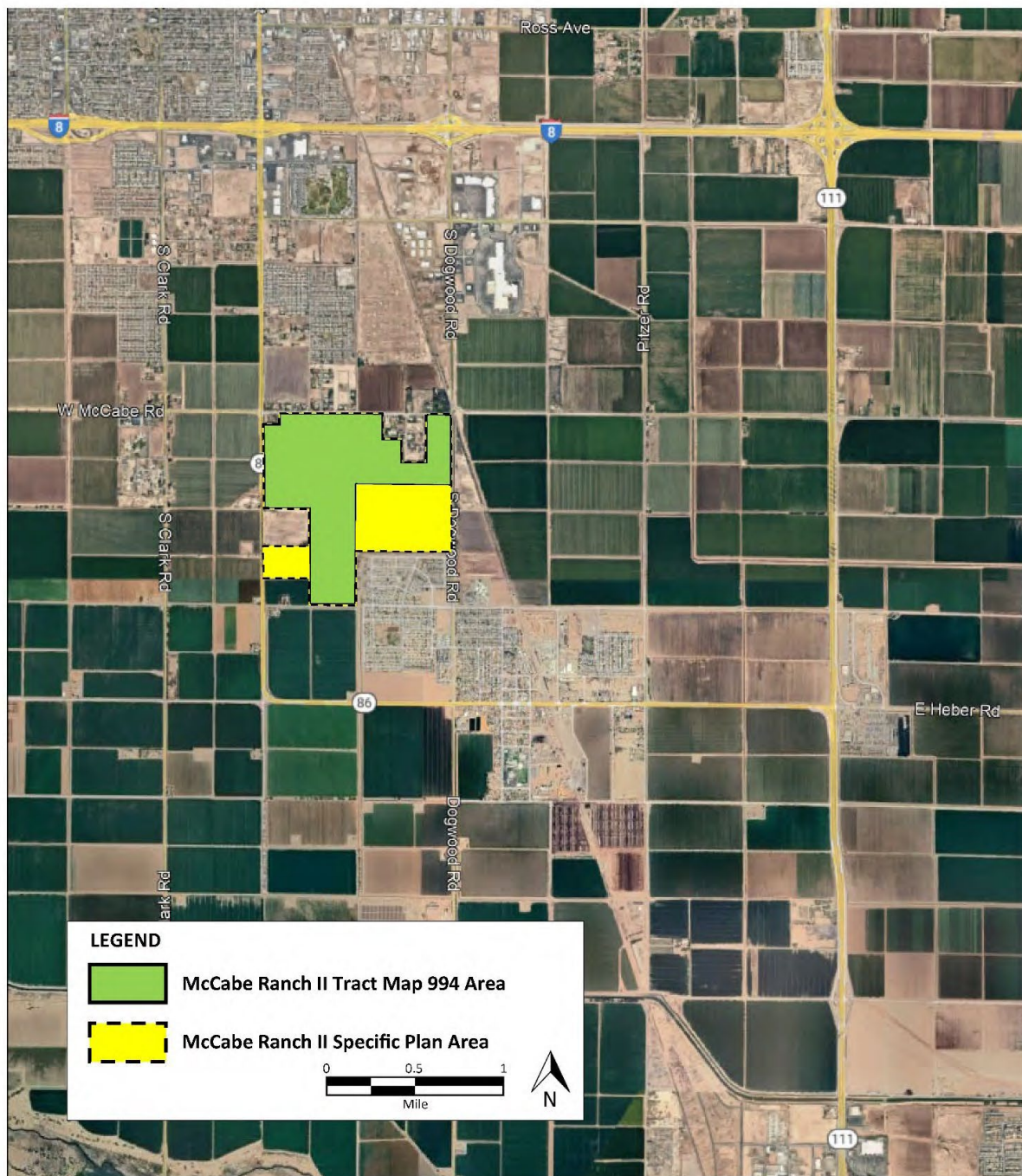
Incorporation of these additional measures is anticipated to conserve an estimated **948 AFY** of water supply demand if operating under curtailment which is approximately 99 percent of overall water supply demand for the Project. Due to the fact that the project will be taken out of agricultural productivity.

Figure 1: Project Site Regional Location



Source: Dubose Design Group

Figure 2: Aerial Map of Project Vicinity



Source: McCabe Realty, LLC, 2024



Project Location Map
McCabe Ranch II Tract Map 994 (TR000994)
Figure 2

Figure 3: Aerial View Map-Delineating Subject Parcel(s) (and all affected parcels) in relation to surrounding land uses

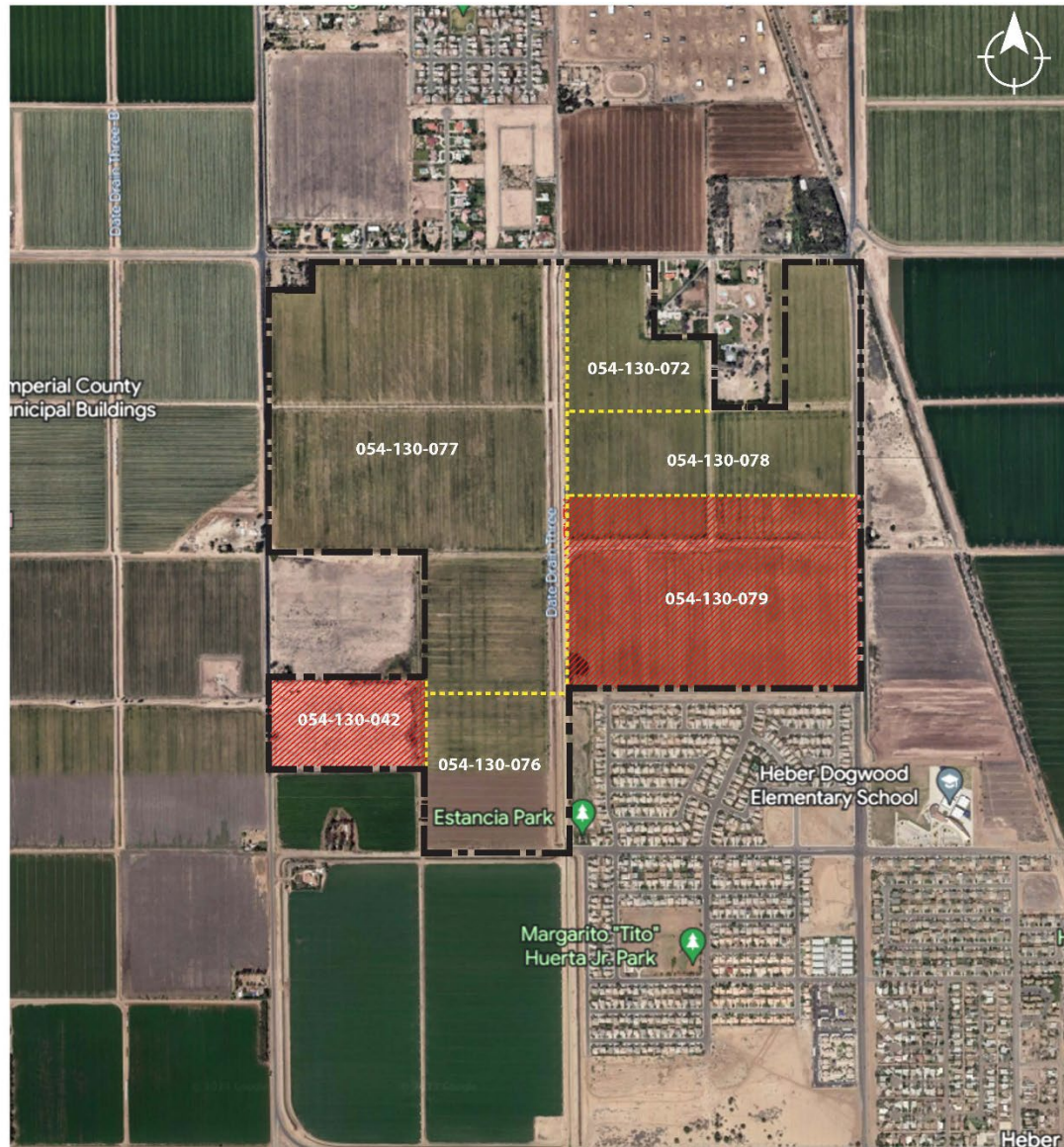
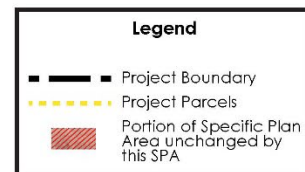


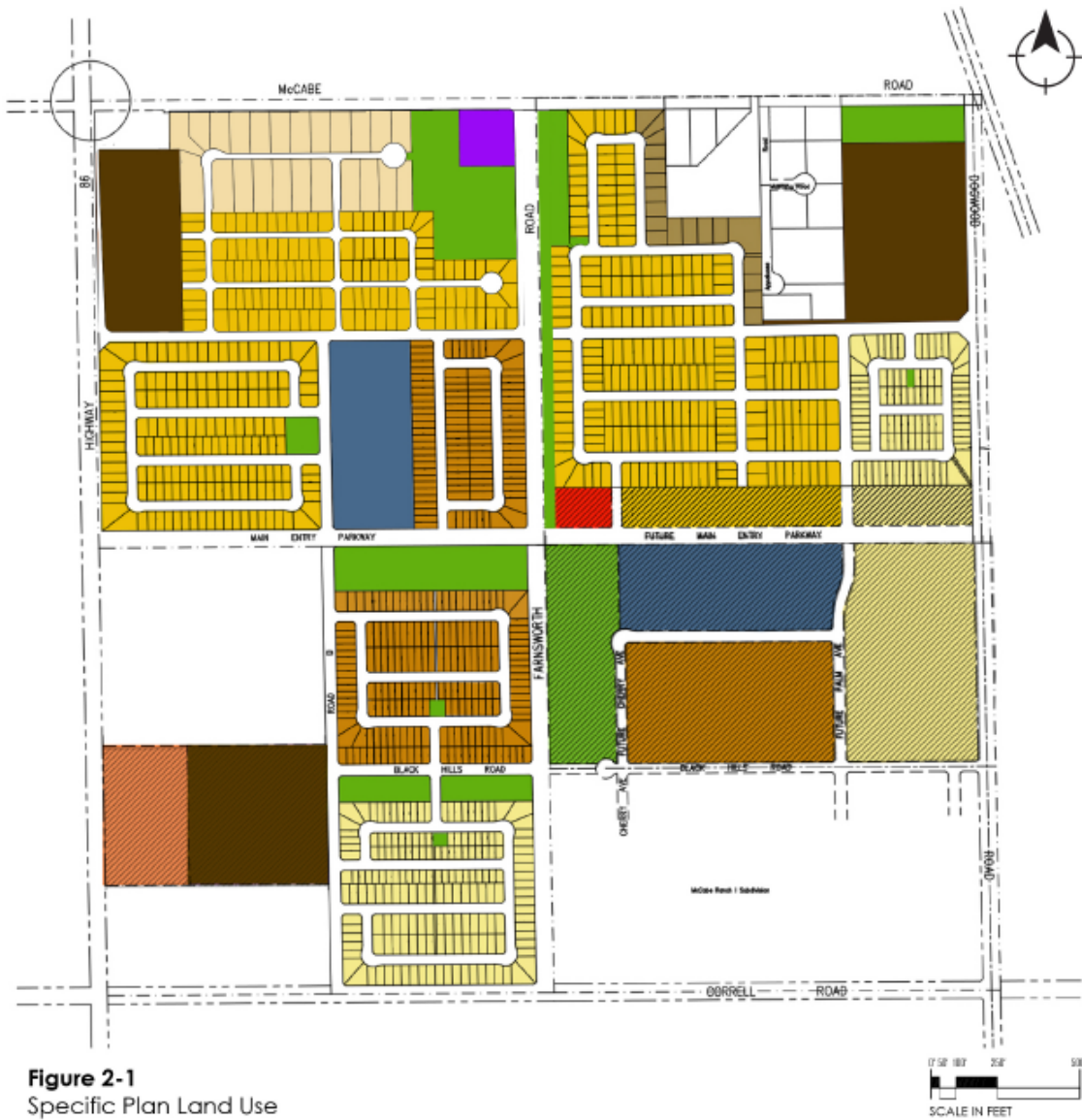
Figure 1- 2
Specific Plan Boundary

0' 100' 250' 500'
SCALE IN FEET



Source: Dubose Design Group

Figure 4: Project Layout/Site Plan



Description of IID Service Area

The proposed Project site is located in Imperial County in the southeastern corner of California. The County is comprised of approximately 4,597 square miles or 2,942,080 acres.³ Imperial County is bordered by San Diego County to the west, Riverside County to the north, the Colorado River/Arizona boundary to the east, and 84 miles of International Boundary with the Republic of Mexico to the south. Approximately fifty percent of Imperial County is undeveloped land under federal ownership and jurisdiction. The Salton Sea accounts for approximately 11 percent of the Imperial County's surface area. In 2024, sixteen percent (16%) of the area was in irrigated agriculture (468,530 acres), including 14,676 acres of the Yuma Project, some 35 sections or 5,568 acres served by Palo Verde Irrigation District (PVID), and 448,286 net acres served by IID.^{4, 5}

The area primarily served by IID is located in the Imperial Valley, which is generally contiguous with IID's Imperial Unit, lies south of the Salton Sea, north of the U.S./Mexico International Border, and generally in the 699,132-acre area between IID's Westside Main and East Highline Canals. In 2024, IID delivered untreated water to 497,241 acres, predominantly in the Imperial Valley, along with small areas of East and West Mesa land, including non-agricultural use, but excluding temporarily fallowed land.

The developed area consists of seven incorporated cities (Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland), three unincorporated communities (Heber, Niland and Seeley), and three institutions (Naval Air Facility [NAF] El Centro, Calipatria CDCR, and Centinela CDCR) and supporting facilities. **Figure 5** provides a map of the IID canal network, as well as cities, communities, and main canals.

Climate Factors

Imperial Valley, located in the Northern Sonoran Desert, which has a subtropical desert climate is characterized by hot, dry summers and mild winters. Clear and sunny conditions typically prevail, and frost is rare. The region receives 85 to 90 percent of possible sunshine each year, the highest in the United States. Winter temperatures are mild, rarely dropping below 32°F, but summer temperatures are very hot, with more than 100 days over 100°F each year. The remainder of the year has a relatively mild climate with temperatures averaging in the mid-70s.

The 100-year average climate characteristics are provided in **Table 4**. Climate Characteristics, Imperial, CA 100-Year Record, 1925-2025. Rainfall contributes around 50,000 AF of effective agricultural water per inch of rain. Most rainfall occurs from November through March; however, summer storms can be significant in some years. Annual areawide rainfall is shown in **Table 5 IID Areawide Annual Precipitation (In), (1990-2024)**. The thirty-year, 1995-2024, average annual air temperature was 74.13°F, and average annual rainfall was 2.40 inches, see **Table 7** and **Table 6**. This record shows that while average annual rainfall has fluctuated, the 10-year average temperatures have slightly increased over the 30-year averages.

³ Imperial County General Plan, Land Use Element 2008 Update

⁴ USBR website: [Yuma Project](#). PVID contacted AJ Slagan for acreage February 13, 2024.

⁵ [IID Annual Inventory of Areas Receiving Water Years 2023, 2022, 2021](#)

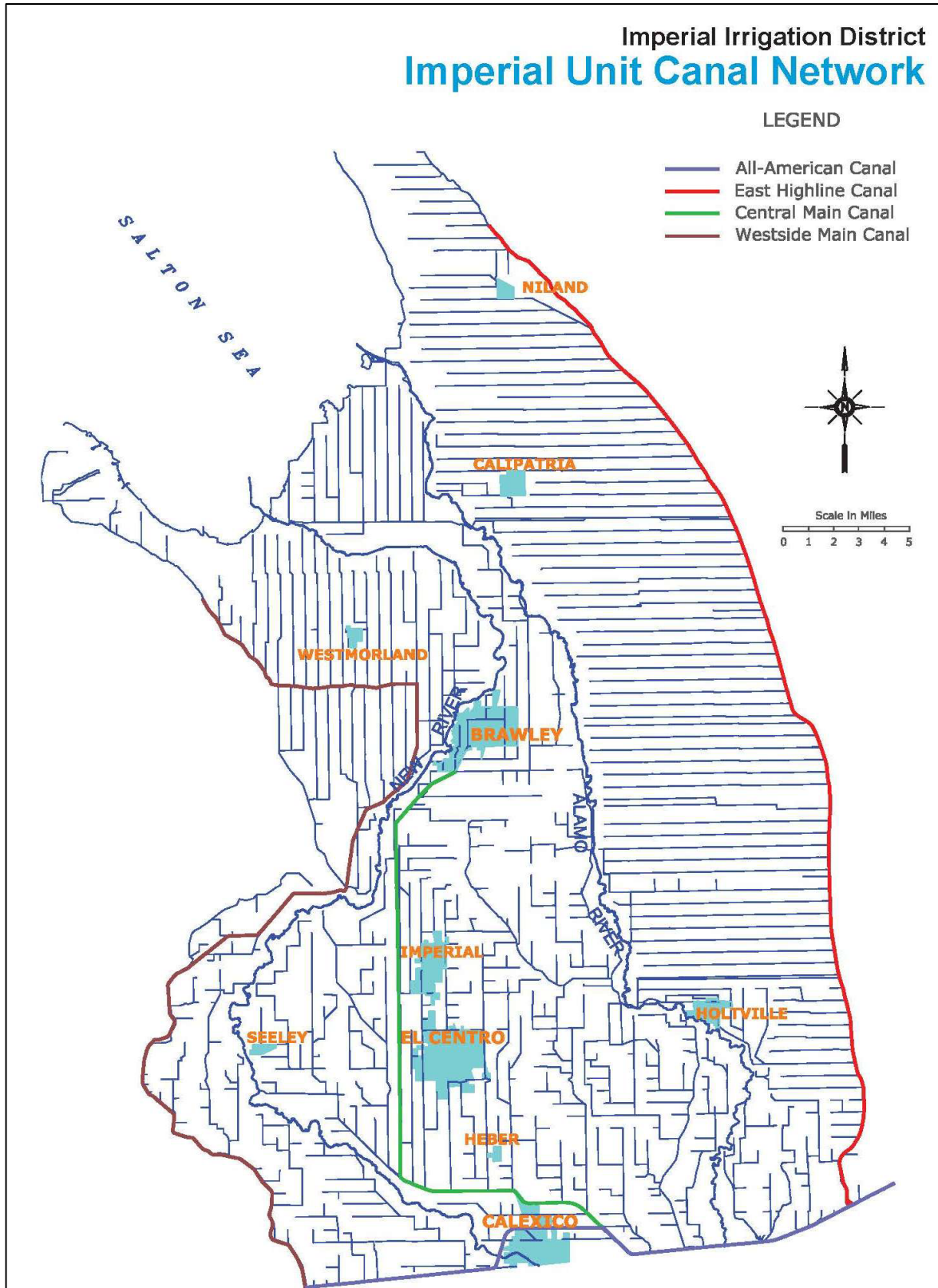


Figure 5: IID Imperial Unit Boundary and Canal Network

Table 4 Climate Characteristics, Imperial, CA 100-Year Record, 1925-2024

Climate Characteristic	Annual Value
Average Precipitation (100-year record, 1925-2024)	2.75 inches (In)
Minimum Temperature, Jan 1937	16 °F
Maximum Temperature, July 1995	121 °F
Average Minimum Temperature, 1925-2024	48.5 °F
Average Maximum Temperature, 1925-2024	98.4 °F
Average Temperature, 1925-2024	73.2 °F

Source: IID Imperial Weather Station Record

Table 5 IID Areawide Annual Precipitation (In), (1990-2024)

1990	1991	1992	1993	1994	1995	1996
1.646	3.347	4.939	2.784	1.775	1.251	0.685
1997	1998	1999	2000	2001	2002	2003
1.328	2.604	1.399	0.612	0.516	0.266	2.402
2004	2005	2006	2007	2008	2009	2010
4.116	4.140	0.410	1.331	1.301	0.619	3.907
2011	2012	2013	2014	2015	2016	2017
2.261	2.752	2.772	1.103	2.000	1.867	2.183
2018	2019	2020	2021	2022	2023	2024
1.305	3.017	2.685	1.688	1.265	1.404	1.815

Source: Computation based on polygon average of CIMIS as station came online in the WIS.⁶

Notable from Table 5 (above) and Table 6 (below) is that while average annual rainfall measured at IID Headquarters in Imperial, California, has been decreasing, monthly average temperatures are remarkably consistent.

Table 6 Monthly Mean Temperature (oF) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024)

	Jan			Feb			Mar			Apr		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	81	34	58	85	36	51	92	42	67	101	49	74
30-year	81	34	57	84	36	60	93	41	66	100	47	72
100-year	80	32	56	84	35	59	91	40	65	99	46	71
	May			Jun			Jul			Aug		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	104	54	77	115	62	89	116	72	95	115	73	94
30-year	106	54	78	113	60	87	115	69	93	114	70	93
100-year	105	53	78	113	59	86	114	68	92	113	68	91
	Sep			Oct			Nov			Dec		
	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg	Max	Min	Avg
10-year	112	65	88	103	53	78	90	40	65	82	36	58
30-year	111	63	88	102	51	76	90	39	64	81	33	56
100-year	111	61	86	102	49	75	89	38	63	80	32	56

Source: IID Imperial Headquarters Station Record (Data provided by IID staff)

⁶ From 1/1/1990-3/23/2004, 3 CIMIS stations: Seeley, Calipatria/Mulberry, Meloland; 3/24/2004-7/5/2009, 4 CIMIS stations (added Westmorland N.); 7/6/2009-12/1/2009, 3 CIMIS stations: Westmorland N. offline; 12/2/2009-2/31/2009, 4 CIMIS stations, Westmorland N. back online; 1/1/2010-9/20/2010.

Table 7 Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2015-2024, 1995-2024, 1925-2024)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
10-year	0.58	0.17	0.27	0.11	0.08	0.01	0.07	0.16	0.34	0.12	0.17	0.32	2.38
30-year	0.43	0.35	0.23	0.09	0.05	0.00	0.13	0.23	0.31	0.16	0.19	0.31	2.40
100-year	0.38	0.36	0.24	0.10	0.03	0.00	0.10	0.30	0.35	0.24	0.19	0.47	2.75

Source: IID WIS: CIMIS stations polygon calculation (Data provided by IID staff).

Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions, and Golden State Water (which includes all or portions Calipatria, Niland, and some land adjacent within Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. Industries outside the municipal areas treat the water to the required standards of their industry. To comply with U.S. Environmental Protection Agency (USEPA) requirements and avoid termination of canal water service, residents in the IID water service area who do not receive treated water service must obtain alternative water service for drinking and cooking from a state-approved provider. To avoid penalties that could exceed \$25,000 a day, IID strictly enforces this rule. The IID Water Department tracks nearly 3,200 raw water service accounts required by the State Water Resources Control Board's Department of Drinking Water to have alternate state approved drinking water service. IID maintains a small-acreage pipe and drinking water database and provides an annual compliance update to the Department of Drinking Water.

Imperial Valley Historic and Future Land and Water Uses

Agricultural development in the Imperial Valley began at the turn of the twentieth century. In 2023, gross agricultural production for Imperial County was valued at \$2,692,716,000, of which approximately \$2.6 billion was produced in the IID water service area.⁷ While the agriculture-based economy is expected to continue, land use is projected to change somewhat over the years as industrial and/or alternative energy development and urbanization occur in rural areas and in areas adjacent to existing urban centers, respectively.

- **McCabe Ranch II Tract Map 994** & how the project will benefit the county by adding housing stock to Imperial County for future anticipated growth meeting housing demands.

Imperial Valley's economy is gradually diversifying. Agriculture will likely continue to be the primary industry within the valley; however, two principal factors anticipated to reduce crop acreage are renewable energy (geothermal and solar) and urban development. Over the next twenty years, urbanization is expected to slightly decrease agriculture land use to provide space for an increase in residential, commercial and industrial uses. The transition from agricultural land use typically results in a net decrease in water demand for municipal, commercial, and solar energy development, and a net increase in water demand for geothermal energy development. Local energy resources include geothermal, wind, biomass and solar. The County General Plan provides for development of energy production centers or energy parks within Imperial County.⁸ Alternative energy facilities will help California meet its statutory and regulatory goals for increasing renewable power generation and use and decrease water demands in Imperial County.

⁷ http://www.co.imperial.ca.us/ag/docs/spc/crop_reports/2017_Imperial_County_Crop_and_Livestock_Report.pdf 2022 Imperial County Crop and Livestock Report

The IID Board has adopted the following policies and programs to address how to accommodate water demands under the terms of the QSA/ Transfers Agreements and minimize potential negative impacts on agricultural water uses:

[Imperial Integrated Regional Water Management Plan](#): adopted by the board on December 18, 2012, and by the County, the City of Imperial, to meet the basic requirement of California Department of Water Resources (CDWR) for an IRWM plan. In all, 14 local agencies adopted the 2012 Imperial IRWMP.

[Interim Water Supply Policy for Non-Agricultural Projects](#): adopted by the board on September 29, 2009, to ensure sufficient water will be available for new development, in particular, anticipated renewable energy projects until the board selects and implements capital development projects such as those considered in the Imperial IRWMP.

[Temporary Land Conversion Fallowing Policy](#): adopted by the board on May 8, 2012, and revised on March 29, 2016, to provide a framework for a temporary, long-term fallowing program to work in concert with the IWSP and IID's coordinated land use/water supply strategy.

[Equitable Distribution Plan](#): final adoption by the board on July 26, 2023, to provide a mechanism for IID to administer apportionment of the district's quantified annual supply of Colorado River water.

In addition, water users within the IID service area are subject to the statewide requirement of reasonable and beneficial use of water under the California Constitution, Article X, section 2.

Imperial Integrated Regional Water Management Plan (October 2012)

The Imperial IRWMP serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the City of Imperial City Council and the IID Board of Directors approved it in December 2012. Approval by these three (3) stakeholders met the basic requirement of the California Department of Water Resources (CDWR) for an IRWMP at the time. Through the IRWMP process, IID presented to the region stakeholders' options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water.⁸ As discussed herein, long-term water supply augmentation is not anticipated to be necessary to meet proposed Project demands.

Chapter 5 of the 2012 Imperial IRWMP addresses water supplies (Colorado River and groundwater), demand, baseline and forecast through 2050; and IID water budget. Chapter 12 addresses projects, programs and policies, and funding alternatives. Chapter 12 of the IRWMP lists, and Appendix N details, a set of capital projects that IID might pursue, including the amount of water that might result (AFY) and cost (\$/AF) if necessary. These also highlight potential capital improvement projects that could be implemented in the future.

⁸ October 2012 [Imperial Integrated Regional Water Management Plan](#), Chapter 12.

Imperial Valley historic 2015 and 2020 and the forecasted future for 2025 to 2055 non-agricultural water demand, are provided in **Table 8** in five-year increments. Total water demand for non-agricultural uses is projected to be 201.4 KAF in the year 2055. This is a forecasted increase in the use of non-agricultural water of 94 KAF from 107.4 KAF for the period of 2015 to 2055. These values were modified from Chapter 5 of the Imperial IRWMP to reflect updated conditions from the IID Provisional Water Balance for calendar year 2015 and 2020. Due to the recession in 2009, state policies affecting municipal water use in relation to the drought and other factors, non-agricultural growth projections have lessened since the 2012 Imperial IRWMP. Projections in **Table 8** have been adjusted (reduced by 3% for Municipal and Industrial uses and applied a flat 0.5 AF increase for Recreation use) to reflect IID 2015 and 2020 delivery data adjustments. Even with these adjustments, the **Table 8** projections for non-agricultural water demand within the IID water service area continue to reflect an unlikely aggressive growth.

Table 8: Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Municipal	30.0	30.9	36.8	39.8	41.5	46.3	51.7	57.8	61.9
Industrial	26.4	28.7	39.8	46.5	53.2	59.9	66.6	73.3	80.0
Other	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Feedlots/Dairies	17.8	19.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Envr Resources	8.3	9.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Recreation	7.4	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Service Pipes	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Non Ag	107.4	115.1	136.1	145.8	154.2	165.7	177.8	190.6	201.4

Notes: 2015 non-agricultural water demands are from IID 2015 Provisional Water Balance rerun 01/25/2021; 2020-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2015 Provisional Water Balance; 2020 non-agricultural water demands are from IID 2020 Provisional Water Balance rerun on 01/31/2022; 2025-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2020 Provisional Water Balance. Industrial Demand includes geothermal, but not solar, energy production.

Agricultural evapotranspiration (ET) demand of approximately 1,476.4 KAF in 2015, decreased in 2020 to approximately 1,442.2 KAF. The termination of fallowing programs provided 103.5 KAF of water for Salton Sea mitigation in 2017. Forecasted agricultural ET remains constant, as reductions in water use are to come from efficiency conservation not reduction in agricultural production. Market forces and other factors may impact forecasted future water demand.

Table 9 provides the 2015 and 2020 historic and 2025-2055 forecasted agricultural consumptive use and delivery demand within the IID water service area. When accounting for agriculture ET, tailwater and tile water, total agricultural consumptive use (CU) demand ranges from 2,157.9 KAF in 2015 to 2,208.5 KAF in 2055. Forecasted total agricultural delivery demand is around 1 KAFY higher than the CU demand, ranging from 2,158.9 KAF in 2015 to 2,209.5 KAF in 2055.

Table 9: Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Ag ET from Delivered & Stored Soil Water	1,476.4	1,442.2	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5
Ag Tailwater to Salton Sea	282.9	312.9	268.0	218.0	218.0	218.0	218.0	218.0	218.0
Ag Tilewater to Salton Sea	398.6	410.2	423.0	423.0	423.0	423.0	423.0	423.0	423.0
Total Ag CU Demand	2,157.9	2,165.4	2,258.5	2,208.5	2,208.5	2,208.5	2,208.5	2,208.5	2,208.5
<i>Subsurface Flow to Salton Sea</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>	<i>1.0</i>
Total Ag Delivery Demand	2,158.9	2,166.4	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5

Notes: 2015 record from IID 2015 Provisional Water Balance rerun 06/28/2019; 2020 record from IID 2020 Provisional Water Balance rerun 01/25/2021; 2020-2055 forecasts from spreadsheet used to develop Figure 19, et seq. in Imperial IRWMP Chapter 5 (Data provided by IID staff).

In addition to agricultural and non-agricultural water demands, system operation demand must be included to account for operational discharge, main and lateral canal seepage, including seepage along the All-American Canal (AAC); and for AAC seepage, river evaporation and phreatophyte ET from Imperial Dam to IID's measurement site at AAC Mesa Lateral 5. These system operation demands are shown in **Table 10 for 2020**. IID measures system operational uses and at All-American Canal Station 2900 just upstream of Mesa Lateral 5 Heading. Total system operational use for 2020 was 167.8 KAF, including 10 KAF of LCWSP input, 39 KAF of seepage interception input, and 40 KAF of unaccounted canal water input.

Table 10: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam. (KAF), 2020

Delivery System Evaporation	24.4
Canal Seepage	90.8
Main Canal Spill	10.1
Lateral Spill	121.5
QSA & IID Seepage Interception	-39.0
Unaccounted Canal Water	-40.0
Total System Operational Use, In valley	167.8
Imperial Dam to AAC @ Mesa Lat 5 (<i>Dam-Mesa Lat 5</i>) (2,552,674-2,546,152)	9.2
LCWSP	-10.0
Total System Operational Use in 2020	167.0

Source: 2020 IID Water Balance rerun 01/25/2021

IID Interim Water Supply Policy for Non-Agricultural Projects (September 2009)

The IID IWSP provides a mechanism to address water supply requests for new non-agricultural projects being developed within the IID water service area. The IWSP designates up to 25,000 AFY of water to be conserved from IID's annual Colorado River water supply, consumptive use cap, for new non-agricultural projects. The IWSP provides a mechanism and process to develop a water supply agreement for any appropriately permitted project and

establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed to offset the new demand.⁹

The environmental impacts of conserving up to 25,000 acre-feet of IWSP water were analyzed in the *Imperial Irrigation District Interim Water Supply Policy for Non-Agricultural Projects* Negative Declaration, State Clearinghouse No. 2009061103 dated June 25, 2009. The IID Board adopted this Negative Declaration on September 29, 2009.

Depending on the nature, complexity and water demands of the proposed project, new projects may be charged a one-time Reservation Fee and annual Water Supply Development Fees for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project. The 2025 IWSP fee schedule is shown in **Table 11**.

Table 11: Interim Water Supply Policy 2024 Annual Non-Agricultural Water Supply Development Fee Schedule

Annual Demand (AF)	Reservation Fee (\$/AF)*	Development Fee (\$/AF)*
0-500	\$91.39	\$365.54
501-1000	\$128.67	\$514.68
1001-2500	\$161.57	\$646.28
2501-5000	\$199.59	\$798.34

Note: Adjusted annually in accordance with the Consumer Price Index (CPI).

IID customers with new projects receiving water under the IWSP will be charged the appropriate water delivery rate based on measured deliveries, see [IID Water Rate Schedules](#). As of January 2025, IID has issued two water supply agreement and one “Will-Serve Letter” under the IWSP for 6,380 AFY, leaving a balance of 18,620 AFY of potential water supply available for additional conservation and contracting under the IWSP.

IID Temporary Land Conversion Following Policy (May 2012)

Imperial County planning officials determined that renewable energy facilities were consistent with the county’s agricultural zoning designation and began issuing conditional use permits (CUPs) for these projects with 30-year terms with a 10-year extension (40 years in total). These longer-term, but temporary, land use designations were not conducive to a coordinated land use/water supply policy as envisioned in the Imperial IRWMP, because temporary water supply assignments during a Conditional Use Permit (CUP) term were not sufficient to meet the water supply verification requirements for new project approvals. Agricultural landowners also sought long-term assurances from IID that, at project termination, irrigation service would be available for them to resume their farming operations.

Based on these conditions, IID determined it had to develop a water supply policy that conformed to the local land use decision-making in order to facilitate new development and economic diversity in Imperial County which resulted in the IID Temporary Land Conversion Following Policy (TLCFP).¹⁰ IID concluded that certain lower water use projects could still provide benefits to local water users. The resulting benefits; however, may not be to the same categories of use (e.g., municipal, commercial and industrial) but to the district as a whole.

⁹ IID website: [Municipal, Industrial and Commercial Customers](#).

¹⁰ IID website: [Temporary Land Conversion Following Policy \(TLCFP\)](#), and The [TLCFP](#) are the sources of the text for this section.

At the general manager's direction, IID staff developed a framework for a fallowing program that could be used to supplement the IWSP and meet the multiple policy objectives envisioned for the coordinated land use/water supply strategy. Certain private projects that, if implemented, will temporarily remove land from agricultural production within the district's water service area include renewable solar energy and other non-agricultural projects. Such projects may need a short-term water supply for construction and decommissioning activities and longer-term water service for facility operation and maintenance or for treating to potable water standards. Conserved water will be credited to the extent that water use for the new project is less than the historic water use for the project site's footprint as determined by the ten-year water use history.¹¹

Water demands for certain non-agricultural projects are typically less than that required for agricultural production; this reduced demand allows conserved water to be made available for other users under IID's annual consumptive use cap. This allows the district to avail itself of the ability during the term of the QSA/Transfer Agreements under [CWC Section 1013](#) to create conserved water through projects such as temporary land fallowing conservation measures. This conserved water can then be used to satisfy the district's conserved water transfer obligation and for environmental mitigation purposes.

Under the terms of the legislation adopted to facilitate the QSA/Transfer Agreements and enacted in [CWC Section 1013](#), the [TLCFP](#) was adopted by the IID board on May 8, 2012 and revised on March 29, 2016 to update the fee schedule for 2016. This policy provides a framework for a temporary, long-term fallowing program to work in concert with the IWSP. While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce efficiency conservation and water use reduction demands on IID water users, thus providing district wide benefits.

Imperial Irrigation District's Water Rights

The laws and regulations that influence IID's water supply are noted in this section. The Law of the River (as described below), along with the 2003 Quantification Settlement Agreement and Related Agreements serve as the laws, regulations and agreements that primarily influence the findings of this WSA. These agreements grant California the most senior water rights along the Colorado River and specify that IID has access to 3.1 MAF per year. These two components will influence future decisions in terms of water supply availability during periods of shortages.

California Law

IID has a longstanding right to divert Colorado River water, and IID holds legal titles to all of its water and water rights in trust for landowners within the district (CWC §20529 and §22437; *Bryant v. Yellen*, 447 U.S. 352, 371 (1980), fn.23.). Beginning in 1885, a number of individuals, as well as the California Development Company, made a series of appropriations of Colorado River water under California law for use in the Imperial Valley. The rights to these appropriations were among the properties acquired by IID from the California Development Company.

¹¹ For details of how water conservation yield attributable to land removed from agricultural production and temporarily fallowed is computed, see [TLCFP for Water Conservation Yield](#).

Law of the River

Colorado River water rights are governed by numerous compacts, state and federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the “Law of the River.” Together, these documents form the basis for allocation of the water, regulation of land use, and management of the Colorado River water supply among the seven basin states and Mexico.

Of all regulatory literature that governs Colorado River water rights, the following are the specifics that impact IID:

Colorado River Compact (1922)
Boulder Canyon Project Act (1928)
California Seven-Party Agreement (1931)
Arizona v. California US Supreme Court Decision (1964, 1979)
Colorado River Basin Project Act (1968)
Quantification Settlement Agreement and Related Agreements (2003)
2003 Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA)
1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs
Annual Operating Plan (AOP) for Colorado River Reservoirs
2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (2007 Interim Guidelines)

Colorado River Compact (1922)

With authorization of their legislatures and urging of the federal government, representatives from the seven Colorado River basin states began negotiations regarding distribution of water from the Colorado River in 1921. In November 1922, an interstate agreement called the “Colorado River Compact” was signed by the representatives giving the Lower Basin perpetual rights to annual apportionments of 7.5 million acre-feet (MAF) of Colorado River water (75 MAF over ten years). The Upper Basin was to receive the remainder, which based on the available hydrological record was also expected to be 7.5 MAF annually, with enough left over to provide 1.5 MAF annually to Mexico.

Boulder Canyon Project Act (1928)

Provisions in the 1928 Boulder Canyon Project Act made the compact effective and authorized construction of Hoover Dam and the All-American Canal and served as the United States’ consent to accept the Compact. Through a Presidential Proclamation on June 25, 1929, this act resulted in ratification of the Compact by six of the basin states and required California to limit its annual consumptive use to 4.4 MAF of the lower basin’s apportionment plus not less than half of any excess or surplus water unapportioned by the Compact. A lawsuit was filed by the State of Arizona after its refusal to sign. Through the implementation of its 1929 Limitation Act, California abided by this federal mandate. The Boulder Canyon Act authorized the Secretary of the Interior (Secretary) to “contract for the storage of water... and for the delivery thereof... for irrigation and domestic uses,” and additionally defined the lower basin’s 7.5 MAF apportionment split, with an annual allocation 0.3 MAF to Nevada, 2.8 MAF to Arizona, and 4.4 MAF to California. Even though the three states never formally settled or agreed to these terms, a 1964 Supreme Court decision (*Arizona v. California*, 373 U.S. 546) declared the three states’ consent to be insignificant since the Boulder Canyon Project Act was authorized by the Secretary.

California Seven-Party-Agreement (1931)

Following implementation of the Boulder Canyon Project Act, the Secretary requested that California make recommendations regarding distribution of its apportionment of Colorado River water. In August 1931, under chairmanship of the State Engineer, the California Seven-Party Agreement was developed and authorized by the affected parties to prioritize California water rights. The Secretary accepted this agreement and established these priorities through General Regulations issued in September of 1931. The first four (4) priority allocations account for California's annual apportionment of 4.4 MAF, with agricultural entities using 3.85 MAF of that total. Additional priorities are defined for years in which the Secretary declares that excess water is available.

Arizona v. California U.S. Supreme Court Decision (1964, 1979)

The 1964 Supreme Court decision settled a 25-year disagreement between Arizona and California that stemmed from Arizona's desire to build the Central Arizona Project to enable use of its full apportionment. California's argument was that as Arizona used water from the Gila River, which is a Colorado River tributary, it was using a portion of its annual Colorado River apportionment. An additional argument from California was that it had developed a historical use of some of Arizona's apportionment, which, under the doctrine of prior appropriation, precluded Arizona from developing the project. California's arguments were rejected by the U.S. Supreme Court. Under the direction of the Supreme Court, the Secretary was restricted from delivering water outside of the framework of apportionments defined by law. Preparation of annual reports documenting consumptive use of water in the three lower basin states was also mandated by the Supreme Court. In 1979, present perfected water rights (PPRs) referred to in the Colorado River Compact and in the Boulder Canyon Project Act were addressed by the Supreme Court in the form of a Supplemental Decree.

In March of 2006, the Supreme Court issued a Consolidated Decree to provide a single reference to the conditions of the original 1964 decrees and several additional decrees in 1966, 1979, 1984 and 2000 that stemmed from the original ruling. The Consolidated Decree also reflects the settlements of the federal reserved water rights claim for the Fort Yuma Indian Reservation.

Colorado River Basin Project Act (1968)

In 1968, various water development projects in both the upper and lower basins, including the Central Arizona Project (CAP) were authorized by Congress. Under the Colorado River Basin Project Act, priority was given to California's apportionment over (before) the CAP water supply in times of shortage. Also under the act, the Secretary was directed to prepare long-range criteria for the Colorado River reservoir system in consultation with the Colorado River Basin States.

Quantification Settlement Agreement and Related Agreements (2003)

With completion of a large portion of the CAP infrastructure in 1994, creation of the Arizona Water Banking Authority in 1995, and the growth of Las Vegas in the 1990s, California encountered increasing pressure to live within its rights under the Law of the River. After years of negotiating among Colorado River Compact States and affected California water delivery agencies, a Quantification Settlement Agreement and Related Agreements and documents were signed

on October 10, 2003, by the Secretary of Interior, IID, Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), San Diego County Water Authority (SDCWA), and other affected parties.

The Quantification Settlement Agreement and Related Agreements (QSA/Transfer Agreements) are a set of interrelated contracts that resolve certain disputes among the United States, the State of California, IID, MWD, CVWD and SDCWA, for a period of 35 to 75 years, regarding the reasonable and beneficial use of Colorado River water; the ability to conserve, transfer and acquire conserved Colorado River water; the quantification and priority of Priorities 3(a) and 6(a)¹² within California for use of Colorado River water; and the obligation to implement and fund environmental impact mitigation.

Conserved water transfer agreements between IID and SDCWA, IID and CVWD, and IID and MWD are all part of the QSA/Transfer Agreements. For IID, these contracts identify conserved water volumes and establish transfer schedules along with price and payment terms. As specified in the agreements, IID will transfer nearly 415,000 AF annually over a 35-year period (or longer), as follows:

to MWD 110,000 AF [modified to 105,000 AF in 2007],
to SDCWA 205,000 AF,
to CVWD and MWD combined 103,000 AF, and
to certain San Luis Rey Indian Tribes up to 11,500 AFY of water.

All of the conserved water will ultimately come from IID system and on-farm efficiency conservation improvements. In the interim, IID has implemented a Fallowing Program to generate water associated with Salton Sea mitigation related to the impacts of the IID/SDCWA water transfer, as required by the State Water Resources Control Board, which is to run from 2003 through 2017. In return for its QSA/Transfer Agreements programs and deliveries, IID will receive payments totaling billions of dollars to fund needed efficiency conservation measures and to pay growers for conserved on-farm water, so IID can transfer nearly 14.5 MAF of water without impacting local productivity. In addition, IID will transfer to SDCWA 67,700 AFY annually of water conserved from the lining of the AAC in exchange for payment of lining project costs and a grant to IID of certain rights to use the conserved water. In addition to the 105,000 acre-feet of water currently being conserved under the 1988 IID/MWD Conservation Program, these more recent agreements define an additional 303,000 AFY to be conserved by IID from on-farm and distribution system conservation projects for transferred to SDCWA, CVWD, and MWD.

Colorado River Water Delivery Agreement (2003)¹³

As part of QSA/Transfer Agreements among California and federal agencies, the Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA) was entered into by the Secretary of the Interior, IID, CVWD, MWD and SDCWA. This agreement involves the federal government because of the change in place of diversion from Imperial Dam into the All-American Canal to Parker Dam into MWD's Colorado River Aqueduct.

¹² Priorities 1, 2, 3(b), 6(b), and 7 of current Section 5 Contracts for the delivery of Colorado River water in the State of California and Indian and miscellaneous Present Perfected Rights within the State of California and other existing surplus water contracts are not affected by the QSA Agreement.

¹³ [CRWDA: Federal QSA](#) accessed 7 June 2017.

The CRWDA assists California to meet its “4.4 Plan” goals by quantifying deliveries for a specific number of years for certain Colorado River entitlements so transfers may occur. For the term of the CRWDA, quantification of Priority 3(a) was affected through caps on water deliveries to IID (consumptive use of 3.1 MAF per year) and CVWD (consumptive use of 330 KAF per year). In addition, California’s Priority 3(a) apportionment between IID and CVWD, with provisions for transfer of supplies involving IID, CVWD, MWD and SDCWA are quantified in the CRWDA for a period of 35 years or 45 years (assumes SDCWA does not terminate in year 35) or 75 years (assumes SDCWA and IID mutually consent to renewal term of 30 years).

Allocations for consumptive use of Colorado River water by IID, CVWD and MWD that will enable California to stay within its basic annual apportionment (4.4 MAF plus not less than half of any declared surplus) are defined by the terms of the QSA/Transfer Agreements **Table 12**. As specified in the QSA/Transfer Agreements, by 2026, IID annual use within (Imperial Valley) is to be reduced to just over 2.6 MAF of its 3.1 MAF quantified annual apportionment. The remaining nearly 500,000 AF (which includes the 67,000 AF from AAC lining) are to be transferred annually to urban water users outside of the Imperial Valley.

Table 12: CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)

User	Apportionment (AFY)
Palo Verde Irrigation District and Yuma Project*	420,000
Imperial Irrigation District	3,100,000
Coachella Valley Water District	330,000
Metropolitan Water District of Southern California*	550,000
Total:	4,400,000

*PVID and Yuma Project did not agree to a cap; value represents a contractual obligation by MWD to assume responsibility for any overages or be credited with any volume below this value. Notes: All values are consumptive use at point of Colorado River diversion: Palo Verde Diversion Dam (PVID), Imperial Dam (IID and CVWD), and Parker Dam (MWD). Source: IID Annual Water Report

Quantification of Priority 6(a) was effected through quantifying annual consumptive use amounts to be made available in order of priority to MWD (38 KAF), IID (63 KAF), and CVWD (119 KAF) with the provision that any additional water available to Priority 6(a) be delivered under IID’s and CVWD’s existing water delivery contract with the Secretary¹⁴ The CRWDA provides that the underlying water delivery contract with the Secretary remain in full force and effect. (*Colorado River Documents 2008*, Chapter 6, pages 6-12 and 6-13). The CRWDA also provides a source of water to affect a San Luis Rey Indian Water Rights settlement. Additionally, the CRWDA satisfies the requirement of the 2001 Interim Surplus Guidelines (ISG) that a QSA be adopted as a prerequisite to the interim surplus determination by the Secretary in the ISG.

Inadvertent Overrun Payback Policy (2003)

The CRWDA Inadvertent Overrun Payback Policy (IOPP), adopted by the Secretary contemporaneously with the execution of the CRWDA, provides additional flexibility to Colorado River management and applies to entitlement holders in the Lower Division States (Arizona, California and Nevada)¹⁵ The IOPP defines inadvertent overruns as “Colorado River water diverted, pumped, or received by an entitlement holder of the Lower Division States that is in excess of the water users’ entitlement for the year.” An entitlement holder is allowed a maximum overrun of 10 percent (10%) of its Colorado River water entitlement when operating under normal conditions.

¹⁴ When water levels in the Colorado River reservoirs are low, Priority 5, 6 and 7 apportionments are not available for diversion.

¹⁵ USBR, 2003 CRWDA ROD Implementation Agreement, IOPP and Related Federal Actions Final EIS. Section IX. Implementing the Decision A. Inadvertent Overrun and Payback Policy. Pages 16-19 of 34.

In the event of an overrun, the IOPP provides a mechanism to pay back the overrun. When the Secretary has declared a normal year for Colorado River diversions, a contractor has from one to three years to pay back its obligation, with a minimum annual payback equal to 20 percent of the entitlement holder's maximum allowable cumulative overrun account or 33.3 percent of the total account balance, whichever is greater. However, when Lake Mead is below 1125 feet on January 1, the terms of the IOPP require that the payment of the inadvertent overrun obligation be made in the calendar year after the overrun is reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report [for] Arizona, California, and Nevada (Decree Accounting Report).¹⁶

1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs

The 1970 Operating Criteria control operation of the Colorado River reservoirs in compliance with requirements set forth in the Colorado River Compact of 1922, the United States-Mexico Water Treaty of 1944, the Colorado River Storage Project Act of 1956, the Boulder Canyon Projects Act (Lake Mead) and the Colorado River Basin Project Act (Upper Basin Reservoirs) of 1968, and other applicable federal laws. Under these Operating Criteria, the Secretary makes annual determinations published in the USBR Annual Operating Plan for Colorado River Reservoirs (discussed below) regarding the release of Colorado River water for deliveries to the lower basin states. A requirement to equalize active storage between Lake Powell and Lake Mead when there is sufficient storage in the Upper Basin is included in these operating criteria. **Figure 6** identifies the major storage facilities at the upper and lower basin boundaries.

¹⁶ 2003 [CRWDA ROD](#), Section IX, A.6.c., page 18 of 34.

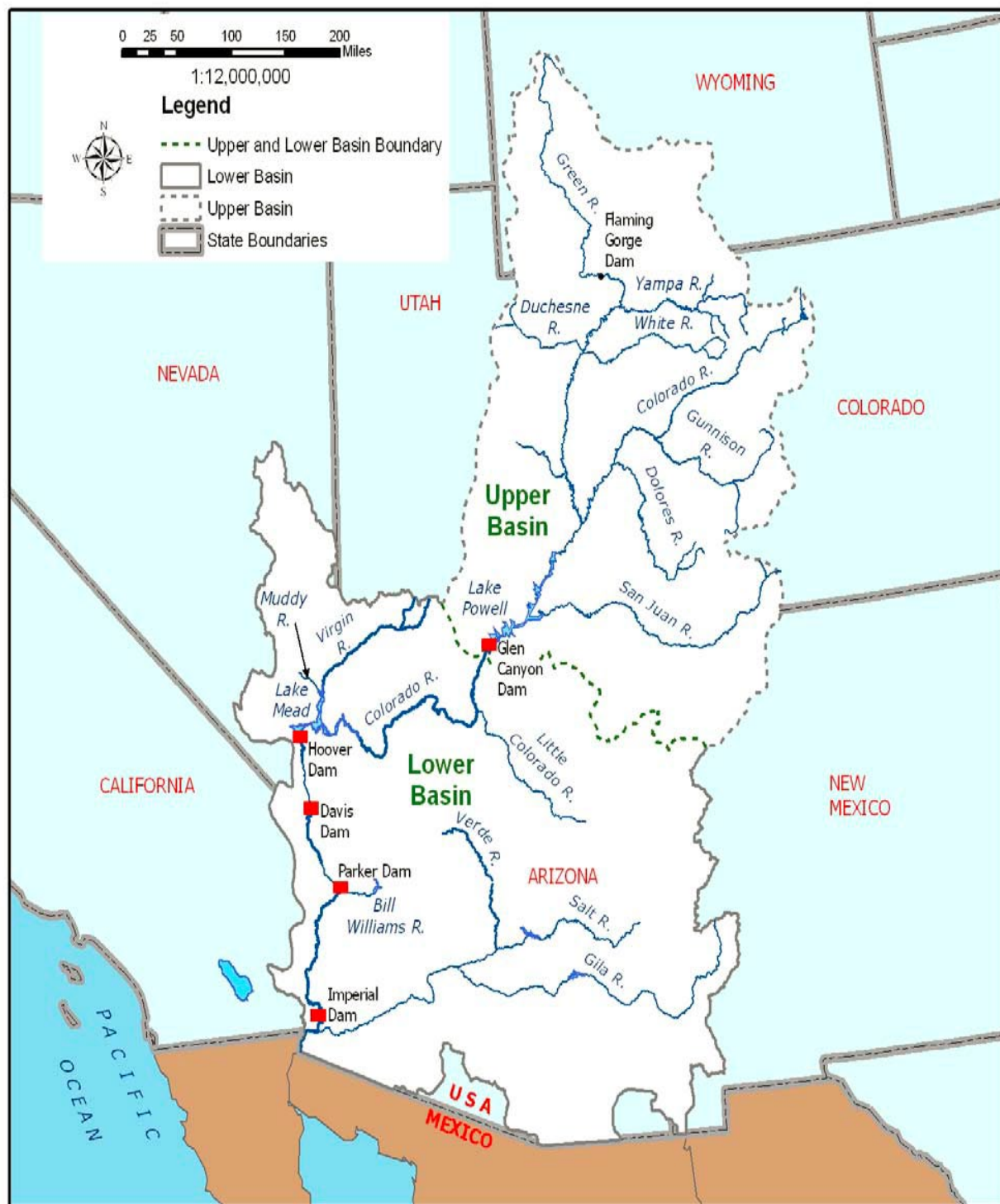


Figure 6: Major Colorado River Reservoir Storage Facilities and Basin Location Map

Source: [Final EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Volume 1 Chapter 1 Purpose and Need](#), p I-10.

Annual Operating Plan for Colorado River Reservoirs (Applicable when Lake Mead Surplus/Shortage)

The Annual Operating Plan (AOP) is developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537); the Criteria for Coordinated Long-Range Operations of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of 1968, as amended, promulgated by the Secretary of the Interior; and Section 1804(c)(3) of the Grand Canyon Protection Act (Public Law 102-575). As part of the AOP process, the Secretary makes determinations regarding the availability of Colorado River water for deliveries to the lower basin states, including whether normal, surplus, and shortage conditions are in effect on the lower portion of the Colorado River.

2007 Colorado River Interim Guidelines for Lower Basin Shortages (2007 Interim Guidelines)

A multi-year drought in the Colorado River Upper Basin triggered the need for the 2007 Interim Shortage Guidelines. In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. However, precipitation fell off starting in October 1999 and 2002 inflow was the lowest recorded since Lake Powell began filling in 1963.¹⁷ By August 2011, inflow was 279 percent (279%) of average; however, drought resumed in 2012 and continued through calendar year 2023. Using the record in **Table 13**, average unregulated inflow to Lake Powell for water years 2000-2024 is 74 percent (74.33 %); or if 2011 is excluded, 71 percent (71.65%) of the historic average.

Table 13: Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2023

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
62%	59%	25%	51%	49%	105%	73%	68%	102%	88%	73%
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
136%	35%	49%	90%	83%	80%	101%	36%	111%	45%	33%
2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
52%	112%	66%								

Source: [UCR Water Operations: Historic Data \(2000-2024\)](#)

In the midst of the drought period, USBR developed 2007 Interim Guidelines with consensus from the seven basin states, which selected the Draft EIS Preferred Alternative as the basis for USBR's final determination. The basin states found the Preferred Alternative best met all aspects of the purpose and need for the federal action.¹⁸

The 2007 Interim Guidelines Preferred Alternative highlights the following:

1. The need for the Interim Guidelines to remain in place for an extended period of time.
2. The desirability of the Preferred Alternative based on the facilitated consensus recommendation from the basin states.
3. The likely durability of the mechanisms adopted in the Preferred Alternative in light of the extraordinary efforts that the basin states and water users have undertaken to develop implementing agreements that will facilitate the water management tools (shortage sharing, forbearance, and conservation efforts) identified in the Preferred Alternative

¹⁷ Water Year: October 1 through September 30 of following year, so water year ending September 30, 1999

¹⁸ USBR *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* <<http://www.usbr.gov/lc/region/programs/strategies.html>>

4. That the range of elements in the Preferred Alternative will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that recognizes the inherent tradeoffs between water delivery and water storage.

In June 2007, USBR announced that a preferred alternative for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (Final Preferred Alternative) had been determined. The Final Preferred Alternative, based on the basin states' consensus alternative and an alternative submitted by the environmental interests called "Conservation Before Shortage," is comprised of four key operational elements which are to guide operations of Lake Powell and Lake Mead through 2026. These four operational elements are:

1. Shortage strategy for Lake Mead and Lower Division states: The Preferred Alternative proposed discrete levels of shortage volumes associated with Lake Mead elevations to conserve reservoir storage and provide water users and managers in the Lower Basin with greater certainty to know when, and by how much, water deliveries will be reduced during low reservoir conditions.
2. Coordinated operations of Lake Powell and Lake Mead: The Preferred Alternative proposed a fully coordinated operation of the reservoirs to minimize shortages in the Lower Basin and to avoid risk of curtailments of water use in the Upper Basin.
3. Mechanism for storage and delivery of conserved water in Lake Mead: The Preferred Alternative proposed the Intentionally Created Surplus (ICS) mechanism to provide for the creation, accounting, and delivery of conserved system and non-system water thereby promoting water conservation in the Lower Basin. Credits for Colorado River or non-Colorado River water that has been conserved by users in the Lower Basin creating an ICS would be made available for release from Lake Mead at a later time. The total amount of credits would be 2.1 MAF, but this amount could be increased up to 4.2 MAF in future years.
4. Modifying and extending elements of the Interim Surplus Guidelines (ISG). The ISG determines conditions under which surplus water is made available for use within the Lower Division states. These modifications eliminate the most liberal surplus conditions thereby leaving more water in storage to reduce the severity of future shortages.

With respect to the various interests, positions, and views of the seven basin states, this provision adds an important element to the evolution of the legal framework for prudent management of the Colorado River. Furthermore, the coordinated operation element allows for adjustment of Lake Powell releases to respond to low reservoir storage conditions in either Lake Powell or Lake Mead. States found the Preferred Alternative best met all aspects of the purpose and need for the federal action.¹⁹ The 2007 Interim Guidelines are in place from 2008 through December 31, 2025 (through preparation of the 2026 Annual Operating Plan).

Lower Colorado Region Water Shortage Operations

The Colorado River Basin is experiencing a prolonged period of drought and record-low runoff conditions that have resulted in historically low reservoir levels in both Lake Powell (upper Basin) and Lake Mead (lower Basin). The period from 2000 through 2024 was the lowest 25-year inflow into Lake Powell in the historical record and has strained the Colorado River system, despite an increase in observed runoff in August 2011 when unregulated inflow

¹⁹ [USBR Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead.](#)

to Lake Powell was 279 percent of the average. Since 2000, Lake Mead has been below the “average” level of lake elevations (**Figure 7**). Such conditions have caused the activation of shortage plans for waters users in Arizona and Nevada, and in Mexico. By May of 2022 Lake Meads elevation had declined to 1,048 feet. These conditions resulted in the U.S. Secretary of the Interior declaring the first-ever Tier 2a Shortage on the Colorado River. The drought in the Colorado River watershed had lessened by mid-2023 after a winter of record-breaking rain and snow but not enough to take the Lower Basin out of a Tier 1 Shortage for 2024 operations.

Lake Mead Water Elevations

Figure 7: Lake Mead Water Elevation Levels 04.06.25 visit <http://www.arachnoid.com/NaturalResources/index.html>



According to guidelines put in place in 2007, Arizona and Nevada begin to take shortages when the water elevation in Lake Mead falls below 1,075 feet. The volumes of shortages increase as water levels fall to 1,050 feet and again at 1,025 feet. In 2012, Mexico agreed to participate in a 5-year pilot agreement to share specific volumes of shortages at the same elevations. The 2007 interim shortage guidelines contain no reductions for California, which has senior water rights to the Central Arizona Project water supply, through 2025 when the guidelines expire. If Lake Mead's elevation drops to 1,025 feet, a re-consultation process would be triggered among the basin states to address the next steps. Consultation would start out within each state, then move to the three lower basin states, followed by all seven states and the USBR. Mexico will then be brought into the process unless they choose to participate earlier. In total, 721,000 acre-feet of reductions will be implemented in the Lower Basin and Mexico in 2023 consistent with various agreements that dictate the operation of the Colorado River.

California has no stipulated reduction to its water supplies under a Tier 2a Shortage declaration. While not directly affected by the shortage reductions announced by Reclamation, the Shortage condition does prevent IID from overrunning its approved water order and as stated earlier, contributions to address Lake Mead water elevation are anticipated by IID. IID has entered into a voluntary water conservation agreement for the benefit of Lake Mead, up to 250,000 AFY, through 2026.

Imperial Irrigation District Water Supply and Demand

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for this Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios. This is due to the small effect rainfall has on water availability in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have some impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation) but does not impact on the definition of a normal year, a single-dry year or a multiple-dry year scenario.

Water Availability – Normal Year

IID is entitled to annual net consumptive use of 3.1 MAF of Colorado River, less its QSA/Transfer Agreement obligations. Imperial Dam, located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona, and Mexico. Water is transported to the IID water service area through the AAC for use throughout the Imperial Valley. IID historic and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 14**. Volumes 2003-2024 are adjusted for USBR Decree Accounting historic records. Volumes for 2025-2077 are from CRWDA Exhibit B modified to reflect 2014 Letter Agreement changes to the 1988 IID/MWD Water Conservation Agreement.²⁰

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID's water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for Consumptive Use (**Table 14**, Column 11). The annual volume is IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 14**, Column 2) less the IID transfer program reductions for each year (**Table 14**, Columns 3-9). IID suggests **Table 14**, which assumes full use of IID's quantified water supply, be used in determining base normal year water availability.

²⁰ [2014 Imperial Irrigation District Letter Agreement](#) for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 17, 2014.

Table 14: IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)

IID Quantification and Transfers, Volumes in KAF at Imperial Dam ¹										
Col 1	2	3	4	5	6	7	8	9	10	11
Year	IID Priority 3(a)								IID Net	
	IID 3(a) Quantified Amount	IID Reductions							IID Total Reduction (Σ Cols 3-9) ⁵	[Available for] Consumptive Use (Col 2 - 10)
		1988 MWD Transfer ²	SDCWA Transfer	AAC Lining	Salton Sea Mitigation SDCWA Transfer ³	Intra- Priority 3 CVWD Transfer	MWD Transfer w/ Salton Sea Restoration ⁴	Misc. PPRs		
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.1	8.0	0.0	11.5	280.1	2566.7
2010	3,100	105.0	70.0	67.7	33.8	12.0	0.0	11.5	294.8	2540.5
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	262.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.9
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.3	2,480.9
2016	3,100	105.0	100.0	67.7	130.8	41.0	0.0	11.5	456.0	2,504.3
2017	3,100	105.0	100.0	67.7	105.3	45.0	0.0	9.9	432.9	2,667.1
2018	3,100	105	130.0	67.7	0.1	63	0.0	9.7	375.5	2,724.5
2019 ⁶	3,100	105	160.0	67.7	46.55	68	0.0	6.9	454.2	2,645.8
2020	3,100	105	192.5	67.7	0.0	73	0.0	9.1	448.0	2,652.0
2021	3,100	105	205.0	67.7	0.0	78	0.0	9.3	465.0	2,635.0
2022	3,100	105	202.5	67.7	0	83	0.0	9.8	468.0	2,632.0
2023 ⁷	3,100	105	150.0	67.7	0	88	0.0	11.5	422.2	2,677.8
2024 ⁷	3,100	105	150.0	67.7	0	93	0.0	11.5	427.2	2,672.8
2025	3,100	105	200	67.7	0	98	0.0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2029-37	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2038-47 ⁸	3,100	105	200	67.7	0	103	0.0	11.5	487.2	2,612.8
2048-77 ⁹	3,100	105	200	67.7	0	50	0.0	11.5	434.2	2,665.8

1. 2003 through 2024, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID conservation/use was not included in Exhibit B.
2. 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY
3. Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
4. *This transfer is not likely given lack of progress on Salton Sea restoration as of 2018; shaded entries represents volumes that may vary..*
5. Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any); Misc. PPRs. Amounts are independent of increases and reductions as allowed by the IOPP.
6. In order to resolve the outstanding 2010 Salton Sea mitigation water pre-delivery issue, IID left 46,546 AF of extraordinary conservation in Lake Mead. See IID's December 19, 2019 revised 2019 water order and Reclamation's March 10, 2020 approval letter.
7. In 2023, 50 KAF of ICS was foregone by SDCWA for the benefit of Lake Mead under the Drought Response Plan by Reclamation.
8. Assumes SDCWA does not elect termination in year 35.
9. Assumes SDCWA and IID mutually consent to renewal term of 30 years.
10. Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

Source: [CRWDA: Federal QSA](#) Exhibit B, p 13; updated values from [2023 Annual Water & QSA Implementation Report](#)

CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represents the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 50,000 to 100,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR.

Expected Water Availability – Single Dry and Multiple Dry Year

Historically, when drought conditions exist within the IID water service area, as has been the case for the past two decades, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID historically relied solely on its entitlement for Colorado River water. Due to the priority of IID water rights and other agreements, drought conditions affecting Colorado River water supplies cause shortages for Arizona, Nevada and Mexico, before impacting California and IID. Accordingly, the Net Available for Consumptive Use volumes in **Table 14**, Column 11 represents the water supply at Imperial Dam available for diversion by IID in single-dry year and multiple-dry year scenarios, consistent with IID's senior water rights. The runoff declines in the upper basin and prolonged drought conditions throughout the west have resulted, for the first time, in the Colorado River operating under a Tier 2a Shortage Condition in 2023, creating long-term water supply uncertainties throughout the Basin states. The expiration of the 2007 Guidelines add to the uncertainty of operations post 2026.

Water Management under a Suspended Inadvertent Overrun Payback Policy (IOPP)

Under normal operating conditions, the CRWDA Inadvertent Overrun Payback Policy (IOPP), provided IID with some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order was permissible, and IID had up to three years to pay water use above the annual water order. When Lake Mead's water level is at or below 1,125 feet on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Decree Accounting Report, the IOPP prohibits additional overruns and requires that outstanding overruns be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, the payback is to be made in the calendar year following publication of the overrun in the USBR Decree Accounting Report. The IOPP is suspended during shortage conditions. For historic IID annual rainfall, net consumptive use, transfers and IID underrun/overrun amounts, see **Table 15**.

Table 15: IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2024

Year	IID Total Annual Rainfall	IID Water Users	IID/MWD Transfer	IID/ SDCWA Transfer	SDCWA Transfer Salton Sea Mitigation	IID Underrun / Overrun	IID/CVWD Transfer	AAC Lining
1988		2,947,581						
1989		3,009,451						
1990	91,104	3,054,188	6,110					
1991	192,671	2,898,963	26,700					
1992	375,955	2,575,659	33,929					
1993	288,081	2,772,148	54,830					
1994	137,226	3,048,076	72,870					
1995	159,189	3,070,582	74,570					
1996	78,507	3,159,609	90,880					
1997	64,407	3,158,486	97,740					
1998	100,092	3,101,548	107,160					
1999	67,854	3,088,980	108,500					
2000	29,642	3,112,770	109,460					
2001	12,850	3,089,911	106,880					
2002	12,850	3,152,984	104,940					
2003	116,232	2,978,223	105,130	10,000	0	6,555		
2004	199,358	2,743,909	101,900	20,000	15,000	-166,408		
2005	202,983	2,756,846	101,940	30,000	15,000	-159,881		
2006	19,893	2,909,680	101,160	40,000	20,000	12,414		
2007	64,580	2,872,754	105,000	50,000	25,021	6,358		
2008	63,124	2,825,116	105,000	50,000	26,085	-47,999	4,000	8,898
2009	30,0354	2,566,713	105,000	60,000	30,158	-237,767	8,000	65,577
2010	189,566	2,545,593	105,000	70,000	33,736	-207,925	12,000	67,700
2011	109,703	2,915,784	103,940	63,278	0	82,662	16,000	67,700
2012	133,526	2,903,216	104,140	106,722	15,182	134,076	21,000	67,700
2013	134,497	2,554,845	105,000	100,000	71,398	-64,981	26,000	67,700
2014	53,517	2,533,414	104,100	100,000	89,168	-797	31,000	67,700
2015	97,039	2,480,933	107,820	100,000	153,327	-90,025	36,000	67,700
2016	90,586	2,504,258	105,000	100,000	130,796	-62,497	41,000	67,700
2017	105,919	2,548,171	105,000	100,000	105,311	-30,591	45,000	67,700
2018	63,318	2,625,422	105,000	130,000	0	0	63,000	67,700
2019	146,384	2,558,136	105,000	160,000	46,555	-34,215	68,000	67,700
2020	130,275	2,493,623	105,000	192,500	0	-98,073	73,000	67,700
2021	81,901	2,552,674	105,000	205,000	0	-37,737	78,000	67,700
2022	61,377	2,577,164	105,000	202,500	0	-6,470	83,000	67,700
2023	68,122	2,417,024	105,000	150,000 ¹	0	-146.8	88,000	67,700
2024	88,063	2,311,905	105,000	150,000 ¹	0	-93,255	93,000	67,700

Notes: Volumes in acre-feet and except Total Annual Rainfall are USBR Decree Accounting Report record at Imperial Dam. IID Total Annual Rainfall from IID Provisional Water Balance, first available calculations are for 1990

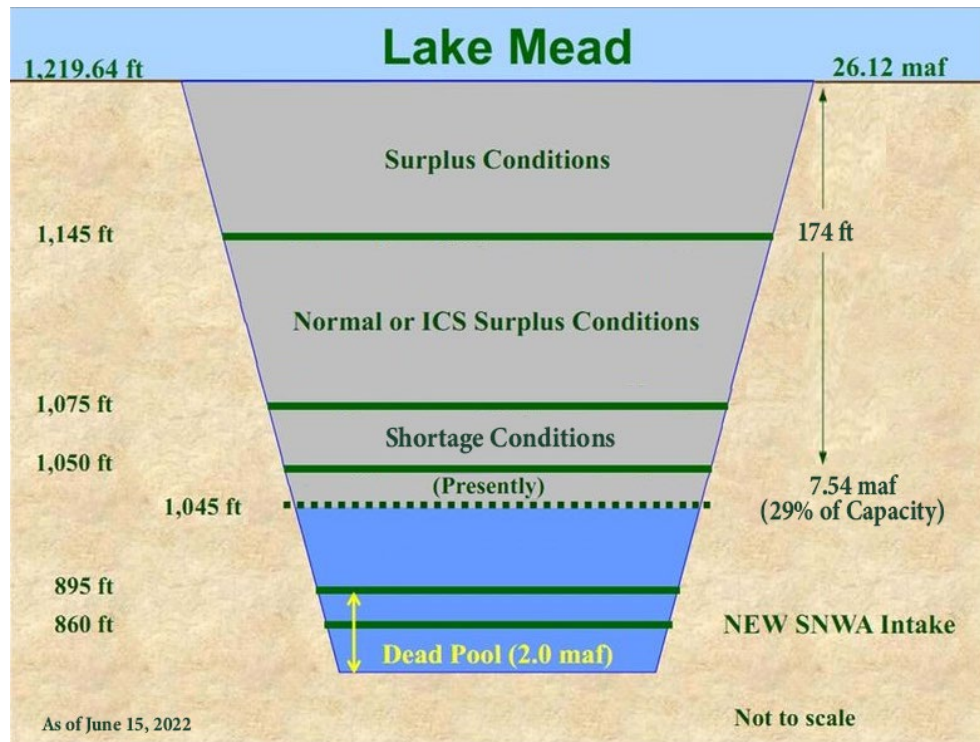
Not all IID QSA programs are shown on this table. Source: [USBR Decree Accounting reports](#), except IID Total Rainfall and IID Overrun/Underrun is a separate calculation

Source: [USBR Decree Accounting reports](#), except IID Total Rainfall and IID Overrun/Underrun is a separate calculation

Source: [2023 IID Annual Water & QSA Implementation Report](#) and [2024 IID SWRCB Report](#); IID Total Rainfall and IID Overrun/ Underrun is a separate calculation

On August 16, 2021, the water level in Lake Mead was 1,060 feet and for the first time since the IOPP came into effect, the Secretary of the Interior declared the first-ever, Tier 1 shortage condition for Colorado River operations, elevations reaching 1,045 as of mid-2022 (**Figure 8**). For IID, this meant that no overruns would be allowed to IID's approved water order and continues in effect through 2024.

Figure 8: Lake Mead Schematic (June 15, 2022)



The flexibility that IID was allowed in 2013 and 2014 is no longer available to the district. Under the terms of the IOPP, no overruns are allowed in a year when payback is required. IID has not experienced any overrun pay back since 2014 as noted in **Table 16**. Under shortage conditions, IID would use any conserved water stored in a non-System reservoir, if available, to prevent any overrun.

Table 16: IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2013-2024

Calendar Year of Payback	2011 Overrun Payback (AF)	2012 Overrun Payback (AF)	Payback Total for Calendar Year (AF)
2013	55,710	-	55,710
2014	20,662	134,076	154,738
Total Payback	76,372	134,076	210,448

Notes: All values are consumptive use volumes at Imperial Dam (AF). 2013 Payback Total was 62 KAF, but in 2012 IID had 6,290 AF of early payback, reducing volume to 55,710 AF.

The 2013 IOPP payback obligation, prohibition on overruns in payback years, and suspension of this flexibility during shortage conditions led the IID Board to implement an apportionment program pursuant to the 2007 EDP, which has been subsequently revised and modified over the years. The 2023 EDP is a version approved and adopted by the IID Board on July 26, 2023 (see Attachment B). The Revised 2023 EDP also establishes a water exchange clearinghouse to facilitate the movement of water supply between all water users and water user categories. The established water

user categories are 1) agricultural water users, 2) industrial/commercial water users and 3) potable water users. As designed, the clearinghouse will allow IID and its water customers to balance water demands with the water supplies that are available to all users.

Generally, the EDP Apportionment, as discussed in the proceeding section, is not expected to impact industrial/commercial uses. However, given the certainty of continuing drought on the Colorado River through 2026 and other stressors, provisions such as the 2012 IWSP Water Agreement sections 3.7 and 3.8 as well for dry and multiple dry year water assessment may come into effect. IID has agreed to work with Project proponents to ensure to the extent possible that the IWSP Water Supply Agreement terms will not adversely impact Project operation. For purposes of this WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute “dry” years for IID. For single-dry year and multiple-dry water year assessments, IID’s EDP shall govern.

Equitable Distribution Plan (EDP) History

A 2006 study by Hanemann and Brookes suggested that overrun conditions were likely to occur 40-50 percent of the years during the decade following the report. Under such conditions a supply/demand imbalance would occur resulting in a need to apportion water consistent with state law. Under California state law, water must be distributed equitably as determined by the IID Board of Directors.

On November 28, 2006, the IID Board of Directors adopted Resolution No 22-2006 approving the development and implementation of an Equitable Distribution Plan to address times when customers’ demand would exceed IID’s Colorado River supply. The EDP, adopted in 2007 allowed the IID Board to institute an apportionment program. As part of this resolution, the IID Board directed the General Manager to prepare the rules and regulations necessary or appropriate to implement the plan within the district. The EDP Regulations were created to enable IID to implement a water management tool (apportionment) to address years in which water demand is expected to exceed supply.

It was expected that an annual EDP Apportionment would be established for each of the next several years, if not for the duration of the QSA. However, the implementation of the EDP apportionment was legally challenged in 2013 with litigation ensuing through 2017 when a statement of decision was issued by the trial court, followed by a writ of mandate and a declaratory judgment later that year. The writ of mandate directed IID to repeal the EDP. On February 6, 2018, the IID board approved a resolution repealing the EDP while the case was on appeal. On July 16, 2020, the appellate court reversed the writ of mandate and declaratory judgment on almost all grounds, including declaratory relief on the water rights issue and IID’s discretion to determine the method of apportionment except for a provision as to how water was prioritized among water user categories. The court ruled that the district is required to distribute water equitably for all categories of users.

On June 21, 2022, IID adopted a revised EDP to address the single outstanding legal issue with respect to prioritization of apportionments among categories of water users. The revised EDP also updated certain operational provisions and most importantly, to the extent feasible, provides for a defined quantity of available, annual water supply apportioned to each water user to prevent cumulative demands from exceeding IID’s available, authorized annual Colorado River supply (Appendix B-Equitable Distribution Plan). In July 2023 the EDP was revised again to allow for direct transfer of water through the IID Clearinghouse and further Implementation of the EDP will resumed in January 1, 2023 and will continue annually thereafter consistent with the latest adopted EDP. For details regarding the EDP and its

implementation, including related forms, please visit IID's website at [Equitable Distribution | Imperial Irrigation District \(iid.com\)](https://iid.com).

Projected Water Supplies

The projected and continued decline in runoff and prolonged drought conditions in the West are expected to contribute to even lower water elevation levels at Lakes Powell and Mead. The Department of the Interior made the decision in early 2022 to protect critical Lake Powell elevations above Glen Canyon Dam by adding 500,000 AF of water from Flaming Gorge reservoir and temporarily reducing the 2022 annual operational release to Lake Mead by 480,000 AF. These conditions resulted in a reduced water apportionment to most of the Lower Division States and Mexico for 2022 through 2024 but did not affect IID's water supply for consumptive use. However, IID's voluntary commitments for Lake Mead have been in effect since 2023 and will continue through 2026 at a maximum conservation volume of 300,000 AFY.

Despite the Department's extraordinary actions, the hydrological forecasts and reservoir elevations would have continued to decline if not for the Basin state contributions, particularly California's commitments. California reductions, or the potential for regulatory reductions by the Secretary of the Interior post 2026 remain undefined as of the date of this water supply assessment for **McCabe Ranch II Tract Map 994**.

IID is working diligently with federal agencies and Colorado River contractors to minimize impacts to the local community. In this vein, IID recognizes the need for significant response actions to protect the long-term water supply certainty for the Imperial Valley as the Colorado River operates under these unprecedented conditions. On October 5, 2022 the Colorado River Board of California, in partnership with representatives of the four primary California Section 5 contractors (IID, Palo Verde Irrigation District, Coachella Valley Water District and Metropolitan Water District of Southern California) submitted a letter to the Department of Interior proposing for California to conserve up to an additional 400,000 AF of water in Lake Mead each year, beginning in 2023 and extending through 2026, to assist with stabilizing Colorado River reservoir elevations. IID has entered into an agreement with Reclamation for its share of the California proposal that would not exceed 300,000 AFY. IID proposes to conserve its contribution to Lake Mead via system and on-farm efficiency conservation and short-term, deficit irrigation (seasonal fallowing).

Project Water Availability for a 20-Year Period to Meet Projected Demands

The proposed Project will obtain drinking water from a certified State of California provider. The Heber Public Utility District a certified State of California Provider. It is further described in detail in later sections of this document.

Untreated Colorado River water will be supplied to the project via the adjacent Imperial Irrigation District's Dogwood Lateral 2 Gate 18-A, Dogwood Lateral 2 Gate 15, Dogwood Lateral 2 Gate 12, Dogwood Lateral 2 Gate 14, Dogwood Lateral 2 Gate 17, Dogwood Lateral 2 Gate 43-A. and is located in Section 20, Range 14 East, Township 16 South San Bernardino Base Meridian under an Industrial type of water agreement with IID. Currently the project site is being used for agricultural purposes, therefore the condition of the gates that are being used to convey water to the project site are currently operational. However, the project site once converted to housing will decrease the amount allocated from IID for agricultural purposes, and begin to use the water apportioned by Heber Public Utility District in their Service Area Plan last updated in 2017.

While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce the need for efficiency conservation and other water use reduction practices on the part of IID and its water users providing the district with wide benefits. One of the considerations in developing the TLCFP was to provide agricultural landowners with long-term assurances from IID that, at Project termination, irrigation service would be available for them to resume farming operations.

IWSP

The IWSP, provided herein as Attachment A, designates up to 25,000 AFY of water for potential conservation for Non-Agricultural Projects within IID's water service area. As of January 2025, IID has up to 18,620 AFY that it may make available for conservation under the IWSP for new projects such as the proposed Project. The IWSP establishes a schedule for Processing Fees, Reservation Fees, and Development Fees that change each year for all non-agricultural projects, and annual Water Supply Development fees for some non-agricultural projects. The proposed Project's water use will be subject to the annual Water Supply Development fee if IID determines that water for the Project is to be supplied under the IWSP.

Given the Colorado River conditions, the likelihood that IID will not receive its annual 3.1 MAF apportionment less QSA/Transfer Agreement obligations of Colorado River water is no longer low despite the high priority of the IID entitlement relative to other Colorado River contractors, see IID's Water Rights section on page 23 and projected water supplies. Given the prolonged drought conditions and recent communication from the Department of the Interior, reductions to all basin contractors, including IID, are increasingly likely. If such obligatory reductions were to come into effect within the 20-year Project life, the Applicants are to work with IID to ensure any anticipated reduction can be managed.

The Heber Public Utility District as the lead agency has a responsibility to determine if the current and projected demands and water supply conditions, including projected uncertainties of Colorado River hydrology are sufficient to enable the County to make the findings necessary to approve this WSA. IID, like any water provider, has jurisdiction to manage the water supply within its service area and impose conservation measures during a period of temporary water shortage, such as the one we are experiencing .

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Expected Water Demands for the Proposed Project

Water for the proposed Project will be needed on-site for grading and dust suppression use. Untreated Colorado River water will be supplied to the project via the Dogwood Lateral 2 through (see below gates) the under a(n) industrial water agreement with IID. Currently the project is receiving water for agricultural purposes.

Project Operational water use by **McCabe Ranch II Tract Map 994** is summarized in **Table 17**.

Table 17 Project Operational Water Uses (AFY)

Water Consumption per AF on Phasing for Dust Suppression & Grading				
Phasing	Acres	Acre Feet (AF)	Year	
Phase 1A	20.8	7.28	2025-2026	7.28
Phase 1B	28.4	9.94	2026-2027	9.94
Phase 2A	60.5	21.175	2029-2031	21.17
Phase 2B	51.4	17.99	2032-2033	17.99
Phase 3A	30.2	10.57	2034-2035	10.57
Phase 3B	30.43	10.6505	2036-2037	10.65
Phase 3C	26.9	9.415	2038-2039	9.415
Phase 4	--	--		
Total Per AF	248.63	87.0205		87.02

As of the date of this WSA, IID delivers untreated Colorado River water to the proposed Project site for agricultural uses through the following gates and laterals. The 10-year record for 2015-2024 of water delivery accounting is shown in **Table 18**. The data documents a 10-year period of 948-AFY average.

Table 18: Ten-Year Historic Delivery (AFY), 2015-2024

Canal/Gate	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
18-A											
15		36	95.3	175.4	90.1	171.8	140.4	140.1	234.5	290.4	261.5
12	94.1	140.7	133.7	100.2	136.8	115.7	123.8	110	97.9	105.6	101
14		81.2	144.7	170.5	203.2	187.6	232.5	270.5	185.4	195.7	250.3
17		121.7	300.1	320.1	257	301.4	380.5	434.6	654.7	435	414.6
43-A		111.1	210.4	119.4	137.9	105.5	141.8	113.8	79	72	54.4
Total	94.1	490.7	884.2	885.6	825	882	1019	1069	1251.5	1098.7	1081.8

Source: IID Staff, 2024 (Contact Samuel Aguirre)

The proposed Project has an estimated total construction water demand of 87.02 AF or 4.35 amortized over a 20-year term (for all delivery gates for Project). Thus, the proposed Project demand is a decrease of 948 AFY from the historical 10-year average or 99.5 percent (99.5%) less than the historic 10-year average annual delivery for

agricultural uses at the proposed Project site. The proposed Project's estimated constructional water demand represents only .02 percent (.02%) of the 18,620 AFY balance of water supply that may be available for contracting under the IWSP.

IID's Ability to Meet Demands With Water Supply

Under normal operating conditions, non-agricultural water demands for the IID water service area are projected for 2025-2055 in **Table 8**, and IID agricultural demands including system operation are projected for 2025-2055 in **Table 9**, all volumes within the IID water service area. IID water supplies available for consumptive use after accounting for mandatory transfers are projected to 2077 in (**Table 14** Column 11), volumes at Imperial Dam.

To assess IID's ability to meet future water demands, IID historic and forecasted demands are compared with CRWDA Exhibit B net availability under its water supply entitlement, volumes at Imperial Dam **Table 14** (Column 11). The analysis requires accounting for system operation consumptive use within the IID water service area, from AAC at Mesa Lateral 5 to Imperial Dam, and for water pumped for use by the USBR Lower Colorado Water Supply Project (LCRWSP), an IID consumptive use component in the USBR Decree Accounting Report. IID system operation consumptive use for 2020 is provided in **Table 19** to show the components to be included in the calculation of 2024 volumes in comparison to 2020.

Table 19: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2024

	2020 Operational Consumptive Use (KAF)	2024 Operational Consumptive Use (KAF)
IID Delivery System Evaporation	24.4	25.2
IID Canal Seepage	90.8	94.9
IID Main Canal Spill	10.1	8.4
IID Lateral Canal Spill	121.5	112.9
IID Seepage Interception	-39.0	-8.9
IID Unaccounted Canal Water	-40.0	-154.2
Total IID System Operational Use, within water service area	167.8	85.0
"Losses" from AAC @ Mesa Lat 5 to Imperial Dam (Station 1117-2900)	9.2	28.5
LCWSP pumpage	-10	-10.0
Total System Operational Use in 2020 and 2024	167.0	103.5

Sources: 2024 IID Water Balance Rerun 03/25/2025

Notwithstanding any regulatory water supply cuts from the Secretary of Interior, IID's ability to meet customer water demands through 2055 as shown in **Table 20** is based on the following:

- Non-agricultural use from **Table 8**.
- Agricultural and Salton Sea mitigation uses from **Table 9**.
- CRWDA Exhibit B net available for IID consumptive use from **Table 14**.
- System operation consumptive use from **Table 19** for 2020.

Table 20: IID Historic and Forecasted Consumptive Use vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055 Next Update in 2026 thru 2055

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Non-Ag Delivery	107.4	113.2	133.1	142.9	151.4	163.2	175.4	188.4	199.3
Ag Delivery	2,158.9	2,165.4	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5
QSA SS Mitigation Delivery	153.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
System Op CU in IID & to Imperial Dam	61.3	167.0	230.5	225.4	225.4	225.4	225.4	225.4	225.4
IID CU at Imperial Dam	2,488.2	2,503.6	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Conservation in Excess of Exhibit B	45.5	51.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total IID CU	2,533.6	2,554.6	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Exhibit B IID Net Available for CU at Imperial Dam (adjusted PPR's 2015/2020)	2,623.7	2,652.7	2,617.8	2,612.8	2,612.8	2,612.8	2,612.8	2,665.8	2,665.8
2015 & 2020 Actual and 2025-2055 Projected IID Underrun (-)/Overrun at Imperial Dam	<u>-90.02</u>	<u>-98.07</u>	5.30	-35.00	-26.50	-14.70	-2.50	-42.50	-31.60

Notes: 2015 and 2020 have been updated to reflect actual consumptive use with respective USBR decree accounting adjustments Non-Ag Delivery CI 15.0%, Ag Delivery CI 3.0%, QSA SS mitigation CI 15% QSA Salton Sea Mitigation Delivery terminated on 12/31/2017 Underrun /Overrun = IID CU at Imperial Dam minus CRWDA Exhibit B Net Available Notes: Ag Delivery for 2025-2055 does not take into account land conversion for solar use nor reduction in agricultural land area due to urban expansion.

As shown above, IID forecasted demand has the potential to exceed CRWDA Exhibit B Net Consumptive Use volumes during several time intervals through the lifespan projection for the Project. However, due to temporary land conversion for solar use and urban land expansion that will reduce agricultural acres in the future, a water savings of approximately 217,000 AFY will likely be generated into the future and for the lifetime of the proposed Project, assuming no regulatory cutbacks are enforced upon IID.

In addition, USBR 2020 Decree Accounting Report states that IID Consumptive Use was 2,493.7 KAF (excludes 1,579 AF of ICS for storage in Lake Mead and an additional 49,444 AF of conserved water left on the Colorado River system) with an underrun of -98.1 KAF, as reported by IID in [2020 Annual SWRCB Report per WRO 2002-2013](#); that is, IID uses less than the amount in its approved Water Order (2,615,300 AF).

Table 21: 2020 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam

IID Approved Water Order	2,625.3 less 10 supplied by LCWSP and less 26 of additional conserved water
IID Consumptive Use	2,493.7
IID Underrun /Overrun	-98.1
Sources: 2020 IID Revised Water Order, approved on March 10, 2020, 2020 Decree Accounting Report , and 2020 Annual Report of IID Pursuant to SWRCB Revised Order WRO 2002-2013	

As reported in the [2023 Annual Water & QSA Implementation Report](#) and [2024 SWRCB Report](#) and presented in Table 15 from 2013 to 2024 IID consumptive use (CU) resulted in underruns; i.e., annual CU was less than the district's QSA

Entitlement of 3.1 MAFY minus QSA/Transfer Agreements obligations. This would indicate that even though **Table 20** shows IID Overrun/Underrun at Imperial Dam **not** exceeding CRWDA Exhibit B Net Available for CU, for the 30-year life of the proposed Project, IID consumptive use may be less than forecasted.

Meanwhile, forecasted Ag Delivery reductions presented in **Table 9** are premised on implementation of on-farm practices that will result in efficiency conservation. These reductions do not take into account land conversion for solar projects nor reduction in agricultural land area due to urban expansion; that is to say, the forecasted Ag Delivery is for acreage in 2003 with reduction for projected on-farm conservation efficiency. Thus, Ag Delivery demand may well be less than forecasted in **Table 9**. In any case, the proposed Project will use less water than the historical agricultural demand of proposed Project site, so the proposed Project will ease rather than exacerbate overall IID water demands.

In the event that IID has issued water supply agreements that exhaust the 25 KAFY IWSP set aside for conservation, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY entitlement less QSA/Transfer Agreements obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing conservation projects to expand the size of the district's water supply portfolio.

These factors will be discussed in the next two sections, Tracking Water Savings from Growth of Non-Agricultural Land Uses and Expanding Water Supply Portfolio.

Tracking Water savings from Growth of Non-Agricultural Land Uses

The Imperial County Board of Supervisors has targeted up to 25,000 acres of agricultural lands, about 5 percent (5%) of the farmable acreage served by IID, for temporary conversion to solar farms; because the board found that this level of reduction would not adversely affect agricultural production. As reported for IID's [Temporary Land Conversion Fallowing Program](#), existing solar developments at the end of 2024 have converted 13,307 acres of farmland. Solar projects had a total yield at-river of 72,320 AF of water in 2024. The balance of the 25,000-acre agriculture-to-solar policy is 11,693 acres. On average, each agricultural acre converted reduces agricultural demand by 5.1 AFY, which results in a total at-river yield (reduction in consumptive use) of 127,500 AFY.

However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early, that land may go immediately back to agricultural use (it remains zoned an agricultural land). Nevertheless, during their operation, the solar farms do ameliorate pressure on IID to implement projects to meet demand from new non-agricultural projects.

Unlike the impact of solar projects, other non-agricultural uses are projected to grow, as reflected in the nearly 85.6 percent (85.6%) increase in non-agricultural water demand from 107.4 KAF in 2015 to 199.3 KAF in 2055 reflected herein in **Table 20**. Although state mandated water conservation goals to municipalities has curtailed the upward trend, **Table 20** continues to depict a conservative scenario. This increase in demand of 92 KAFY is likely to be offset by reductions in agricultural lands; however, as the land remains zoned as agricultural land, that source is not reliable to be permanently available to IID.

The amount of land developed for residential, commercial, and industrial purposes is projected to grow by 55,733 acres from 2015 to 2050²¹ within the sphere of influence of the incorporated cities and specific plan areas in Imperial County. A conservative estimate is that such development will displace at least another 24,500 acres of farmland based on the Imperial Local Agency Formation Commission (LAFCO) sphere of influence maps and existing zoning and land use in Imperial County. At 5.13 AFY yield at-river, there would be a 125,000 AFY reduction IID net consumptive use. However, the total acreage from actual annexations that have resulted in reductions to agricultural acreage between 2015 and 2024 has been 2,224 acres, according to IID's annual inventory of total farmable land which is consistent with the acreage gain to non-agricultural land uses (2,224 acres) and based off of annexation records obtained through the Imperial County Local Agency Formation Commission (ICLAF). This shift in acreage documents a growth rate of approximately 50 percent of the originally projected rate.

The total foreseeable solar project temporary yield at-river (91,800 AFY) and municipal development permanent yield at-river, conservatively adjusted (65,000 AFY) is to reduce forecasted IID net consumptive use at-river 156,800 AFY, which is more than enough to meet the forecast Demand minus Exhibit B Net Available volumes shown in **Table 20**. This Yield at-river is sufficient to meet the forecasted excess of non-agricultural use over Net Available supply within the IID service area for the next 20 years, as is required for SB 610 analysis (assuming there are no regulatory cuts to IID's full entitlement).

Farmland retirement associated with municipal development would reduce IID agricultural delivery requirements beyond the efficiency conservation projections shown in **Table 9**. Therefore, in the event that [Schedule 7 General Industrial Use](#) water has exhausted its apportioned amount, the Applicants will rely on IID IWSP water to supply the Project, as discussed above in the Projected Water Availability section.

Expanding Water Supply Portfolio

The proposed Project as new non-agricultural development may need to enter into a water supply agreement with IID. Upon agreement, the District will procure or develop a water supply for the Project at its sole discretion, which may include policy changes, construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions including the requisite environmental permitting.

While forecasted long-term annual yield-at-river from the reduction in agricultural acreage due to municipal development in the IID service area is sufficient to meet the forecasted excess of non-agricultural use over CRWDA Net Available supply **Table 20** without regulatory cuts and without expanding IID's Water Supply Portfolio, IID has also evaluated the feasibility of a number of capital projects to increase its water supply portfolio.

As reported in [2012 Imperial IRWMP Chapter 12](#), IID contracted with GEI Consultants, Inc. to identify a range of capital project alternatives that the district could implement. Qualitative and quantitative screening criteria and assumptions were developed in consultation with IID staff. Locations within the IID water service area with physical, geographical, and environmental characteristics most suited to implementing short- and long-term alternatives were identified. Technical project evaluation criteria included volumes of water that could be delivered and/or

²¹ IRWMP, Chapter 5, Table 5-14.

stored by each project, regulatory and permitting complexity, preliminary engineering components, land use requirements, and costs.

After preliminary evaluation, a total of 27 projects were configured:

- 17 groundwater or drain water desalination
- 2 groundwater blending
- 6 recycled waters
- 1 groundwater banking
- 1 IID system conservation (concrete lining)

Projects were assessed at a reconnaissance level to allow for comparison of project costs. IID staff and the board identified key factors to categorize project alternatives and establish priorities. Lower priority projects were less feasible due to technical, political, or financial constraints. Preferential criteria were features that increased the relative benefits of a project and grant it a higher priority. Four criteria were used to prioritize the IID capital projects:

1. **Financial Feasibility.** Projects whose unit cost was more than \$600/AF were eliminated from further consideration.
2. **Annual Yield.** Project alternatives generating 5,000 AF or less of total annual yield were determined not to be cost-effective and lacking necessary economies of scale.
3. **Groundwater Banking.** Groundwater banking to capture and store underflows is recognized as a beneficial use of Colorado River water. Project alternatives without groundwater banking were given a lower priority.
4. **Partnering.** Project alternatives in which IID was dependent on others (private and/or public agencies) for implementation were considered to have a lower priority in the IID review; this criterion was reserved for the IRWMP process, where partnering is a desirable attribute.

Based on these criteria, the top ten included six desalinations, two groundwater blending, one system conservation, and one groundwater storage capital projects. These capital projects are listed in **Table 22** which follows. Some of these project alternatives have proven to no longer be feasible due to technical and/or environmental constraints and have been stricken.

Table 22: IID Capital Project Alternatives and Cost (May 2009 price levels)

Name	Description	Capital Cost	O&M Cost	Equivalent Annual Cost	Unit Cost (\$/AF)	In-Valley Yield (AF)
GW 18	Groundwater Blending E. Mesa Well Field Pumping to AAC	\$39,501,517	\$198,000	\$2,482,000	\$99	25,000
GW 19	Groundwater Blending: E. Mesa Well Field Pumping to AAC w/Percolation Ponds	\$48,605,551	\$243,000	\$3,054,000	\$122	25,000
WB 1	Coachella Valley Groundwater Storage	\$92,200,000	\$7,544,000	\$5,736,746	\$266	50,000
DES 8	E. Brawley Desalination with Well Field and Groundwater Recharge	\$100,991,177	\$6,166,000	\$12,006,000	\$480	25,000
AWC 1	IID System Conservation Projects	\$56,225,000	N/A	\$4,068,000	\$504	8,000
DES 12	East Mesa Desalination with Well Field and Groundwater Recharge	\$112,318,224	\$6,236,000	\$12,831,000	\$513	25,000
DES 4	Keystone Desalination with IID Drainwater/Alamo River	\$147,437,743	\$15,323,901	\$23,849,901	\$477	50,000
DES 14	So. Salton Sea Desalination with Alamo River Water and Industrial Distribution	\$158,619,378	\$15,491,901	\$24,664,901	\$493	50,000
DES 15	So. Salton Sea Desalination with Alamo River Water and MCI Distribution	\$182,975,327	\$15,857,901	\$26,438,901	\$529	50,000
DES 2	Keystone Desalination with Well Field and Groundwater Recharge	\$282,399,468	\$13,158,000	\$29,489,000	\$590	50,000

Source: Imperial IRWMP, Chapter 12; see also Imperial IRWMP Appendix N, IID Capital Projects

- ¹ Pumping on the East Mesa via Well Fields was assessed by IID and it was determined that the area is not conducive of groundwater recovery due to the geological conditions in the area and/or environmental challenges.
- ² It has been demonstrated over time that any reduction in Salton Sea water could result in environmental impacts related to existing biological resources, air quality and other potential adverse community impacts. Salton Sea water desalination for redistribution to industrial and/or municipal use is not being pursued at any level.

IID Near Term Water Supply Projections

As mentioned above, IID's quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID's use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including seepage recovery from IID canals and the All-American Canal (ACC) and measures to reduce operational discharge. As the IID website [Water Department](#) states:

Through the implementation of extraordinary conservation projects, the development of innovative efficiency measures and the utilization of progressive management tools, the IID Water Department is working to ensure both the long-term viability of agriculture and the continued protection of water resources within its service area.

Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including this Project for the next 20 years and for the life of the proposed Project under a water supply consistent with the district's full entitlement.

SB 610 & SB 221²²

Senate Bill 610 (SB 610) (Chapter 643, Statutes of 2001) as explained previously and Senate Bill 221 (Chapter 642, Statutes of 2001) amended state law, effective January 1, 2002, to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 and SB 221 are companion measures which seek to promote more collaborative planning between local water suppliers, cities and counties. Both statutes require detailed information regarding water availability to be provided to the Board of Supervisors and other county agencies and decision makers prior to the approval of specific large development, such as McCabe Ranch II Tentative Map 994, amendment to McCabe Ranch II Specific Plan.

Under SB 610, water assessments must be furnished to local government for inclusion in any environmental documentation for certain projects (as defined in Water Code 10912 (a)) subject to the California Environmental Quality Act. Under SB 221 will be greatly facilitated. SB 221 is intended as a “Fail Safe” mechanism to ensure that collaboration on findings the needed water supplies to serve a large new subdivision requires an affirmative written verification if sufficient water supply.

This WSA has been prepared for McCabe Ranch Tentative Tract Map 994, amendment to the McCabe Ranch Specific Plan. In accordance with applicable sections of the Public Resource Code and California Water Code as referenced in SB 610 and SB 221. The proposed Project provides for residential development of 1,079 single family dwelling units and an additional 531 multi-family residential units totaling 1,610 new residential units within the townsite of Heber, California. The tentative tract map also includes various land uses including a 12.3 acres elementary school site, 3.14-acre commercial site, parks and open space totaling 38.78 acres and lastly 48.3 acres devoted to major collector roads. The proposed project spans beginning in 2025 through 2039 the projects expected date of build out.

Legislation

Because of the size of the Proposed Project (more than 500 dwelling units), the State of California, through Senate Bill (SB) 610, requires that a Water Supply Assessment be completed to evaluate the potential effect of the proposed development on current and future water supplies. While the Proposed Project will be implemented by numerous individual development phases that may have fewer than the threshold of 500 units (or a water use equivalent of commercial or office square footage) that triggers the preparation of a Water Supply Assessment, collectively the total project exceeds the threshold. Thus, the city has caused this Water Supply Assessment to be prepared. The following outlines the requirements of SB 610.

SB 221 Flow Chart as it Pertains to Heber Public Utility District (HPUD)

SB 221 suggests that an Urban Water Management Plan (Gov. Code § 66473.7(c)) may be a good source of information for developing a verification. Therefore, it is recommended that each water supplier reviews its most recently adopted UWMP to determine if the supply and demand analysis will provide substantial evidence to satisfy SB 221. Due to the fact that HPUD has less than the necessary potable water connections necessary for the implementation of a Urban Water Management Plan, this project is subject to use. The written verification must be supported by substantial evidence, HPUD’s Service Area Plan (SPA). Verification must demonstrate sufficiency supply by showing that 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.

²²Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. Prepared by the California Department of Water Resources.

- Historical records for at least 20 years;
- Urban Water Shortage Contingency Analysis prepared for Urban Water Management Plan, (or best available documentation see flow charts)
- Supply reduction for “specific water use sector” per water supplier’s resolution, ordinance, or contract, and
- The amount of water expected from specified supply projects. (Government Code § 66473.7(a)(2)(A-D).)

Verification must be based upon “substantial evidence,” possibly including relevant portions of an Urban Water Management Plan or SB 610 assessment. Government Code § 66473.7(c)

The Urban Water Management Planning Act (Water Code § 10631 – see Appendix C) requires the supplier to document water supplies available during normal, single dry, and multiple dry water years during a 20-year projection and the existing and projected future water demand during a 20- year projection. The Act requires that the projected supplies and demands be presented in five-year increments for the 20-year projection.

If the water demand for the proposed subdivision was accounted for in the most recently adopted urban water management plan, the water supplier may incorporate information from the UWMP into the verification. (Government Code § 66473.3)

If the water demand for the proposed subdivision was accounted for in a SB 610 assessment, the water supplier may incorporate information from the UWMP into the verification. (Government Code § 66473.3) The next section contains sample tables and data to demonstrate one method to present the required data.

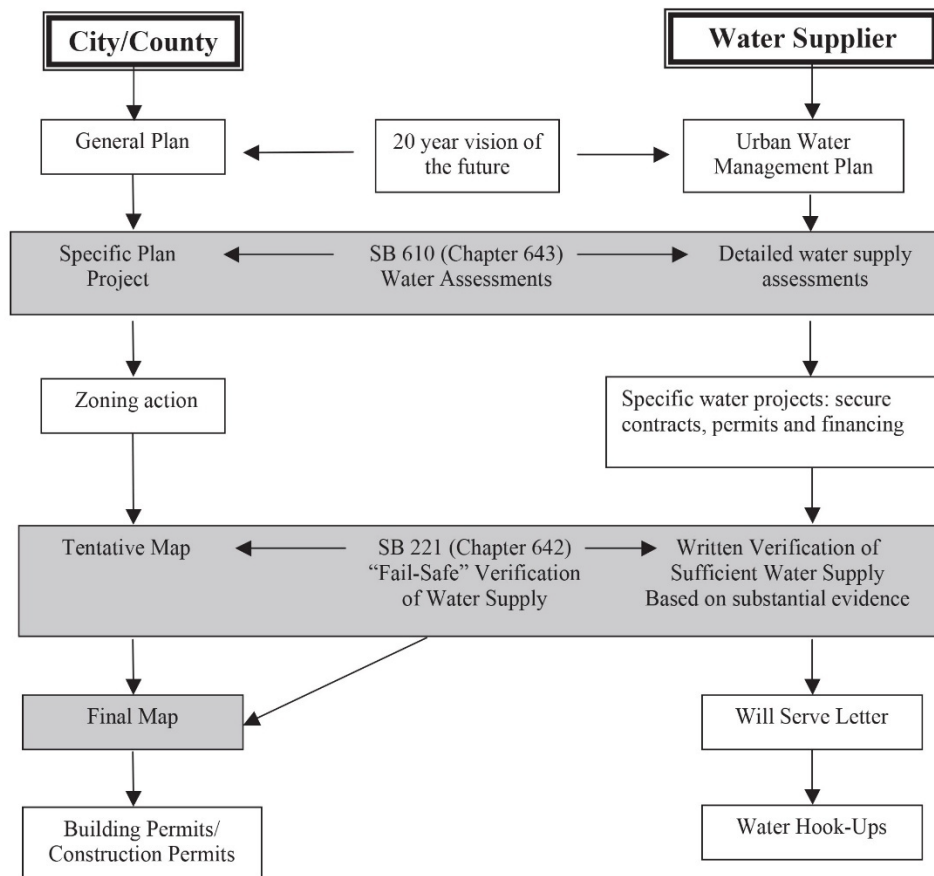
Supplies from all sources including wholesaler suppliers require documentation. This documentation includes identifying water rights and/or contracts to the supply, associated capital outlay programs; federal, state and local permits for constructing infrastructure for conveying the supply, and any necessary regulatory approvals required for conveyance.

Figure 9: Senate Bill 610 & Senate Bill 221

Senate Bill 610 and Senate Bill 221

Two laws that integrate land use and water planning

The following chart illustrates the relationship between a local land use agency and a water supplier in their planning processes. The General Plan, prepared by a City or County Planning Department, and the Urban Water Management Plan prepared by a Water Supplier are the critical source documents used to substantiate the information required by **SB 610** and **SB 221** at the local level.



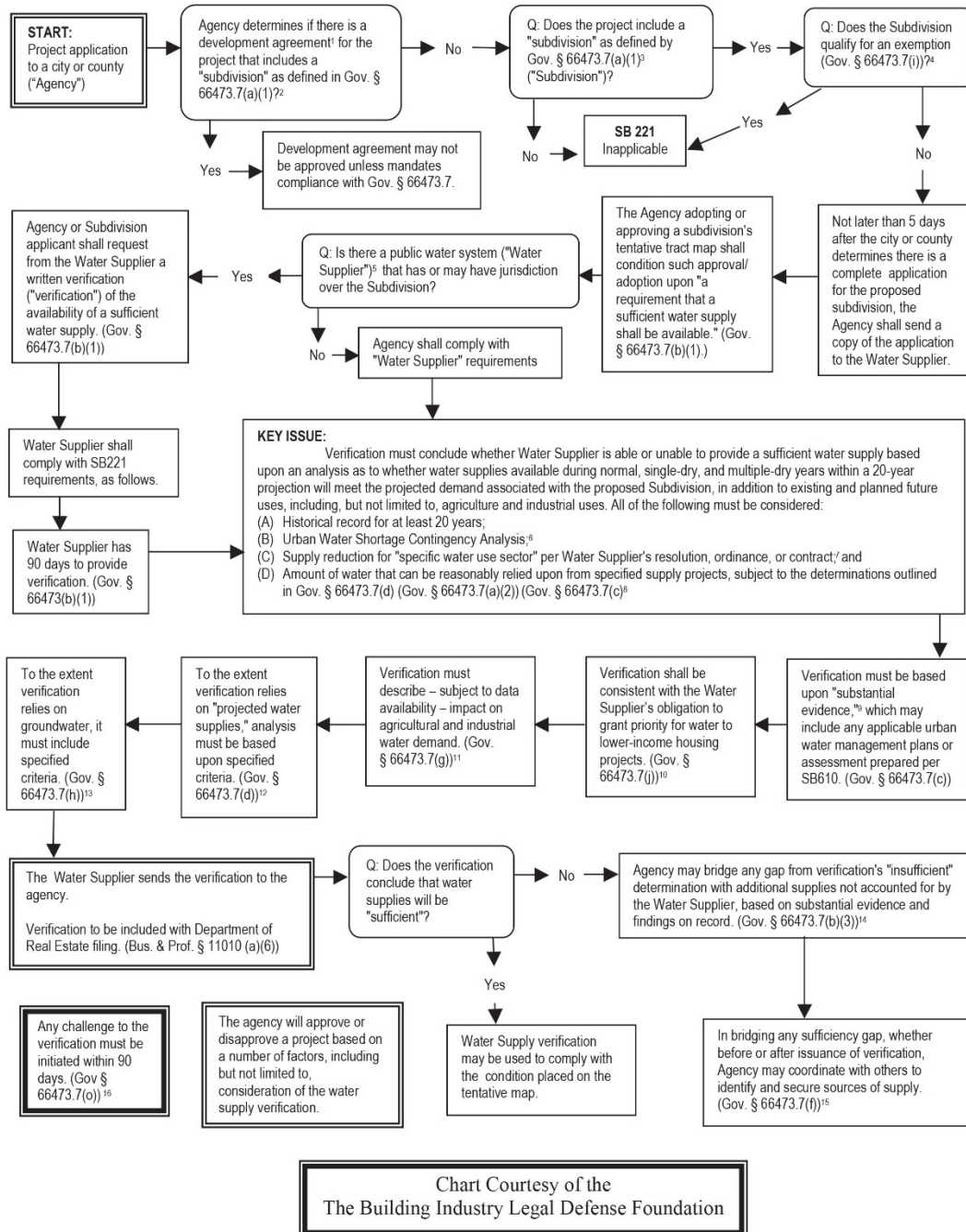
For additional information on either the *California Environmental Quality Act* or General Plan Guidelines, please refer to the publications available from the Governor's Office of Planning and Research at: www.opr.ca.gov.

For information and guidance related to the *Urban Water Management Planning Act*, please refer to the Department of Water Resources, Office of Water Use Efficiency available at: <http://www.owue/>.

Source: Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. Prepared by the California Department of Water Resources. <https://cawaterlibrary.net/wp-content/uploads/2017/06/guidebook.pdf>.

Figure 10: SB221 Flowchart

SB 221 Flowchart



Source: Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001. Prepared by the California Department of Water Resources. <https://cawaterlibrary.net/wp-content/uploads/2017/06/guidebook.pdf>.

General Outlook on Population Growth

The Heber Public Utility District service area has experienced rapid and significant residential growth during the period from 2000-2010. From 1990 to 2000 the service area's population growth was 16.9% (Source: Water Treatment Plant Preliminary Engineering Report, 2008). However, from 2000 to 2010, Heber's population had doubled. As stated earlier, the estimated population was calculated based on the number of residential water connections multiplied by the average household size. Other factors have contributed to this growth.

The Townsite of Heber is immediately south, and within 2 miles of the premier development in the Imperial Valley region – the Imperial Valley Mall. Additional high-end commercial and business development are planned in the immediate vicinity of the Imperial Valley Mall. There is a vibrant population outlook associated with new development planned within HPUD's Sphere of Influence. HPUD's service area, and thus potential growth areas, are comprised of relatively large tracts of vacant, low-priced farmland that has captured the market interest of residential developers. Heber is also near or intersected by several major arterial roadways, including Highway 86, Highway 111, Interstate 8 and Dogwood Road. Highway access makes Heber an attractive location for residential, commercial, and industrial development. As an example, the Imperial Center is a planned commercial development that is expected to significantly contribute to the growth and demand of HPUD services. All of these factors have significantly contributed to Heber's growth rates and it is expected that the growth trend will continue. At the time of the preparation of the Service Area Plan it was estimated that HPUD could have a population base of 12,922 by the year 2040. These figures and projections highlight the importance of planning services to adequately serve the projected population. Population trends and projections are further discussed under Section 3 Growth and Phasing Projections.²³

Heber Public Utility District Water Facilities

The McCabe Ranch II Specific Plan is a long-term development, and it is anticipated that the Plan's Impacts to the water system treatment facility will be funded by the development (and/or other developments withing HPUD) if and when expansion is required.

Heber Public Utility District Distribution System

Water Distribution Facilities- The potable water distribution system consists of approximately 135,000 linear feet (25.5 miles) of pipeline. Of the total water pipelines in the network, there is approximately 8,500 linear feet of 4-inch diameter asbestos cement pipe, 5,080 linear feet of 6-inch diameter asbestos pipe, 64,800 linear feet of 8-inch diameter PVC pipe, 10,130 linear feet of 10-inch diameter PVC pipe, 35,000 linear feet of 12-inch diameter PVC pipe, 1,000 linear feet of 18-inch diameter PVC pipe, and 2,450 linear feet of 20-inch diameter PVC pipeline. The PVC pipe has been installed since the mid and late 1980's. The normal operating pressure of the distribution system is between 50 to 55 pounds per square inch (psi).²⁴

Water Treatment Plant Distribution Pump Station

The district currently owns a Water Treatment Plant system with a water treatment plant capacity of 4.0 million gallons per day (MGD) which was recently constructed in 2017. The average daily demand to the Water Treatment Plans in 2016 was 1.136 million gallons/day, marginally higher than 2017. The maximum demand under both years was 1.7 million gallons/day. The current average daily demand of 1.12 is 28% of the system capacity. If development occurs at the same pace it has had in the past seven years, the water treatment plant would be at 58% capacity in 2040. The following table summarizes the findings of water treatment and distribution facilities.²⁵

²³ Heber Public Utility District 2017 Service Area Plan- <https://www.iclafco.com/assets/special-districts/2017-hpud-sap.pdf>.

²⁴ Heber Public Utility District Service Area Plan Water Facilities January 2018 Page 67.

²⁵ Heber Public Utility District Service Area Plan Executive Summary January 2018 page 5.

Heber Public Utility District Distribution Pump System

Raw Water Pump Station was constructed in 2017 and consists of wet well and three (3) variable speed vertical turbine pumps. Two pumps are duty pumps capable of pumping up to 4 MGD to the Clarifier/Filter Treatment Units and one pump is a standby variable speed pump. Each pump has a capacity of 2 MGD. Water will be conveyed to the new and existing Clarifier/Filter Treatment Units from the Raw Water Pump Station via new force-main pipelines.

Heber Public Utility District Water Storage Facilities

“The recent, 2017 water treatment plant expansion project provides an average daily treatment capacity of 4 MGD. If development occurs at the same pace it has in the past seven years, the water treatment plant would be at 40% capacity in 2040. This assumes a water demand of 125 gallons per person per day. Since there would be plenty of capacity in the historic growth rate scenario, no further analysis was conducted. However, in a total buildout scenario where all developable parcels are built out during this Service Area Plan’s planning horizon, there would be an additional 5,682 equivalent dwelling units (EDU’s). Capacity would be reached just after 2040. As with the wastewater treatment plant, design should commence once 80% capacity is reached. This would occur sometime after 2030 and construction should commence shortly thereafter, ideally prior to reaching 90% capacity.

In 2009, a 36-inch diameter pipeline replaced an existing 18-inch diameter PVC pipeline to convey 7 MGD of raw water from the IID’s Dogwood Canal to the Raw Water Basins. The State of California was requiring that the District have a raw water storage capacity of six (6) days. This would have been equivalent to 12,000,000 gallons of raw water storage. The District was deficient 4,700,000 gallons with respect to raw water supply at the 2 MGD capacity. The District faced two options: construct additional raw water storage basins or construct a portable raw water pump station and transmission pipeline from Imperial Irrigation District Central Main Canal to the District’s Water Treatment Plant. The Central Main Canal is almost never taken out of service and was therefore considered a reliable water source. The District chose the latter option and constructed a potable raw water pump station to meet the State’s raw water storage demands.²⁶

The Heber Public Utility District would be expanding using the Microfloc Trident Water Treatment Units which are often referred to as “packaged treatment systems.” The packaged water treatment systems are pre-assembled prior to delivery to a given water treatment plant. The packaged water treatment systems are purchased and delivered at a designated treatment capacity. The TR840A Microfloc Trident Water Treatment Units are designed to treat 2.0 MGD. Thus, the District will be upgrading the water treatment plant in 2.0 MGD pre-packaged units gradually, as water demand increases.”²⁷

²⁶ Heber Public Utility District Service Area Plan Water Facilities January 2018 Page 69.

²⁷ Heber Public Utility District Service Area Plan Water Facilities January 2018 Page 71-72.

Heber Public Utility District Water Supply and Demand

Supply

The Heber Public Utility District receives raw water from the Imperial Irrigation District. Approximately three percent of the Imperial Irrigation District's untreated water is ultimately used for urban purposes and is provided indirectly to consumers through a variety of public and private treatment agencies.

The City of El Centro's sphere of influence is located within the Imperial Unit of the Imperial Irrigation District's Irrigation (IID) service area. The 699,092-acre Imperial Unit serves the Imperial Valley including the urban areas for the cities of El Centro, Calexico, Imperial and Brawley and approximately a quarter of Imperial County's unincorporated areas. In total, IID delivers water to an area of just over 520,000 acres, including cities, cemeteries, schools, parks, golf courses, etc. in addition to the irrigated land. The Imperial Irrigation District's total service area, lying entirely within Imperial Valley, is divided into four units: Imperial, West Mesa, East Mesa, and Pilot Knob, with a gross acreage of 1,061,637 acres.

Recycled water low in salinity could be used for agricultural purposes; however, treatment and distribution of recycled wastewater low in salinity is not cost-effective option at this time. Colorado River water salinity has averaged 760 parts per million over the last 20 years, and treated municipal wastewater is approximately 200-300 ppm higher in salinity. In addition, agricultural producers are averse to using treated wastewater due to consumer perceptions that the crops might be tainted.

The water supply available to the city is determined by the water treatment plant capacity and raw water influent and distribution piping, which is currently 35,755 acre-feet per year. Multiple dry water years do not affect the City's water supply.

Demand

Water demand in the Plan area varies by land use and from the HPUD SPA projection. Different water demand factors for each land use within the Plan area are used to determine the estimated water needs at build-out of the McCabe Ranch II Specific Plan. The water demand factors and total water demand for each land use within the Plan area are provided in **Table 28** which solely identifies water use for McCabe Ranch II Tract Map 994 within the Specific Plan area.

The Specific Plan area is expected to have an annual water demand of approximately 1,179,080 gallons per day based on the 468-ac Specific Plan. This equates to approximately 3.61 acre-feet per acre year at 325,850 gal per acre-foot. It should be noted that this consumption is significantly less than the historical agricultural requirements of over 5 acre-feet per acre per year. The McCabe Ranch II Tract Map 994 will utilize at full build out approximately 920,160 gallons per day. This equates to approximately 2.82 acre-feet per acre year.

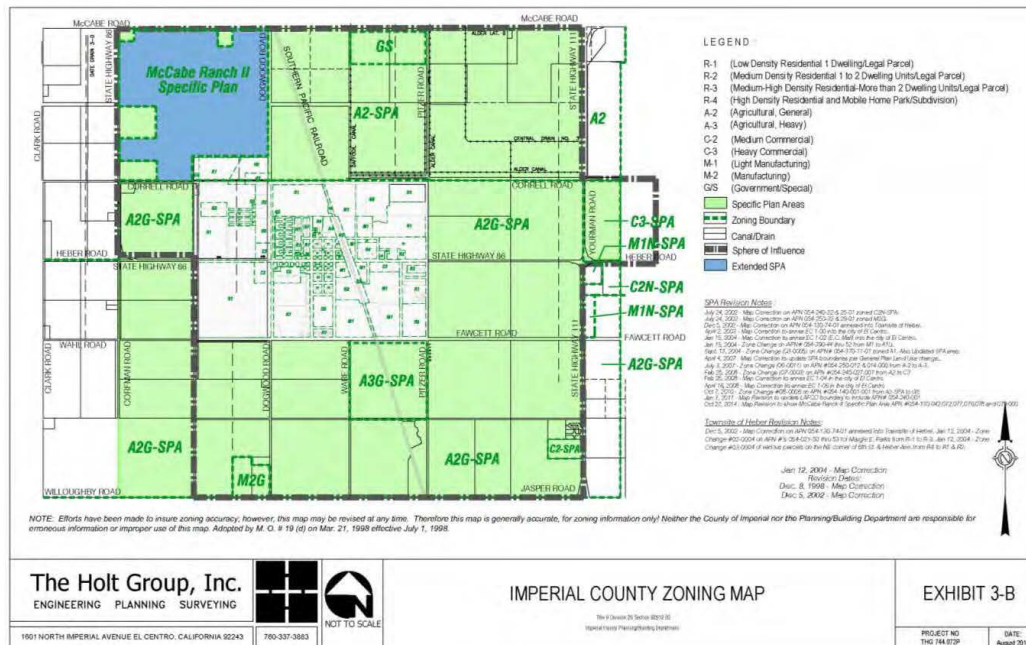
Development Process

Due to the fact that McCabe Ranch Specific Plan Area is Located within the Specific Plan area located in **Figure 1**.

Development outside of the district boundaries and within the HPUD Sphere of Influence will most likely require the developer to prepare a Specific Plan. When a Specific Plan is required, California law also requires adoption of implementation measures including regulations, programs, public works projects, and financing measures necessary to carry out the construction of the proposed development.

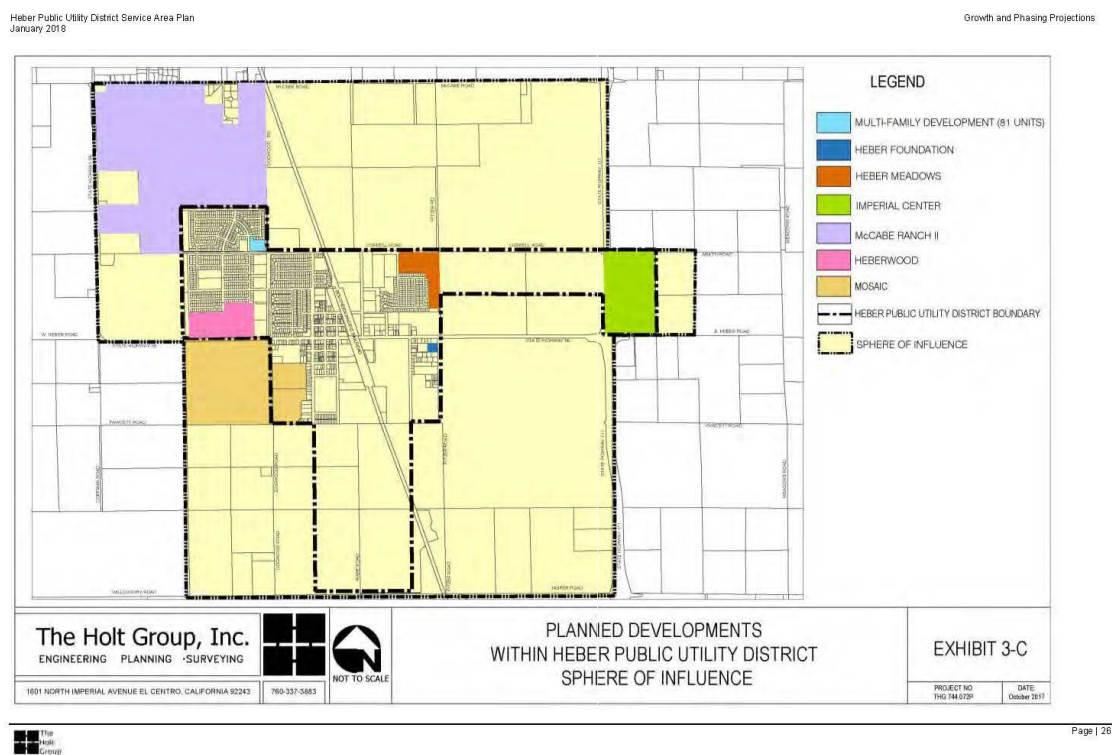
Heber Public Utility District Service Area Plan
January 2018

Growth and Phasing Projections



Source: Heber Public Utility District Service Area Plan 2017; Page 26

Figure 12: Service Area Plan



Source: Heber Public Utility District Service Area Plan 2017; Page 30

Table 23: Wastewater Treatment System Findings

Wastewater Treatment System Findings		
Performance Standard	Must meet or exceed peak demand and meet effluent discharge requirement of the RWQCB.	
Existing Facilities	Treatment Capacity: 1.2 MGD	
Existing Demand	Average Annual Demand up to 0.6 MGD (2006) & 0.5 MGD (2017)	
Adequacy	Adequate (At Less Than 50% of Capacity)	
Future Demand (at 2.7% growth rate)	2020	0.75 MGD
	2030	0.99 MGD
	2040	1.29 MGD
Mitigation	S-1 The District should continue to pursue various means by which to obtain funding and provide for adequate wastewater collection/conveyance facilities. S-2 New Development shall continue to be held responsible for constructing adequate wastewater facilities and/or contributing fair share costs. S-3 The District shall ensure that a Service Agreement be in place, prior to the annexation of new development and that any "Will-Serve" letters have an expiration date if no service connections are made. S-4 The District shall develop a Master Plan for the continued improvements of its Wastewater Treatment and Collection facilities.	
Funding Sources	Current: Wastewater Fund and grant resources. Future: Wastewater Fund and grant resources.	
Annual Budget	Approximately \$1,350,000 (2017)	
Cost Per Capita	\$193.44	

Source: Heber Public Utility District 2017 Service Area Plan Page 4

General Outlook on Population Growth

The Heber Public Utility District service area has experienced rapid and significant residential growth during the period from 2000-2010. From 1990 to 2000 the service area's population growth was 16.9% (Source: Water Treatment Plant Preliminary Engineering Report, 2008). However, from 2000 to 2010, Heber's population had doubled. As stated earlier, the estimated population was calculated based on the number of residential water connections multiplied by the average household size. Other factors have contributed to this growth. The Townsite of Heber is immediately south, and within 2 miles of the premier development in the Imperial Valley region – the Imperial Valley Mall. Additional high-end commercial and business development are planned in the immediate vicinity of the Imperial Valley Mall. There is a vibrant population outlook associated with new development planned within HPUD's Sphere of Influence. HPUD's service area, and thus potential growth areas, are comprised of relatively large tracts of vacant, low-priced farmland that have captured the market interest of residential developers. Heber is also near or intersected by several major arterial roadways, including Highway 86, Highway 111, Interstate 8 and Dogwood Road. Highway access makes Heber an attractive location for residential, commercial, and industrial development. As an example, the Imperial Center is a planned commercial development that is expected to significantly contribute to the growth and demand of HPUD services. All these factors have significantly contributed to Heber's growth rates and it is expected that the growth trend will continue. At the time of the preparation of the Service Area Plan it was estimated that HPUD could have a population base of 12,922 by the year 2040. These figures and projections highlight the importance of planning services to adequately serve the projected population. Population trends and projections are further discussed under Section 3 Growth and Phasing Projections.

Water Treatment & Distribution Facilities Summary Findings

The district currently owns a Water Treatment Plant system with a water treatment plant capacity of 4.0 million gallons per day (MGD) which was recently constructed in 2017. The average daily demand to the Water Treatment Plant in 2016 was 1.136 million gallons/day, marginally higher than 2017. The maximum demand under both years was 1.7 million gallons/day. The current average daily demand of 1.12 is 28% of the system capacity. If development occurs at the same pace it has had in the past seven years, the water treatment plant would be at 58% capacity in 2040. The following table summarizes the findings for water treatment and distribution facilities.

Figure 12: Water Treatment System Findings

Water Treatment System Findings		
Performance Standard	Require minimum flow, pressure, and storage requirements, and minimum quality standards established by the California Department of Public Health (CDPH).	
Existing Facilities	Treatment Capacity: 4.0 MGD Storage Capacity: 7.3 MGD	
Existing Demand	2017 Average Daily Flows: 1.12 MG 2017 Maximum Demand: 1.72 MG	
Adequacy	Adequate (At Less Than 50% of Capacity)	
Future Demand (at 2.7% growth rate)	2020	1.5 MGD
	2030	1.9 MGD
	2040	2.3 MGD
Mitigation	W-1 The HPUD should continue to pursue various means by which to obtain funding. W-2 The District should develop a Master Plan to adequately program capital improvement needs in its aging distribution system. W-3 The District shall ensure that a Service Agreement be in place, prior to the annexation of new development and that any "Will-Serve" letters have an expiration date if no service connections are actually made.	
Funding Sources	Current: Water Fund, grant and loan resources. Future: Water Fund and grant resources.	
Annual Budget	Approximately \$1,746,000 (2017)	
Cost Per Capita	\$250.18	

Source: Heber Public Utility District 2017 Service Area Plan. 2017 Page 5.
https://www.heber.ca.gov/sites/default/files/Service_Area_Plan_2017.pdf.

Wastewater Treatment & Collection Facilities Summary Findings

The HPUD owns, operates and maintains a Wastewater Treatment System which provides services to the Heber community, and areas immediately outside of the district boundary, but within the Sphere of Influence. The sewer treatment plant has a current design and permitted capacity of 1.2 MGD. The average daily flow received at the Heber Public Utility District Wastewater Plant in 2016 and 2017 was approximately 0.46 million gallons per day with peak flows no greater than 0.61 million gallons per day, according to Plant Operators. Thus, WWTP operates at less than 50 percent of capacity. Based on Heber's historic population growth rate of 2.71%, the treatment plant will be at 100% capacity sometime prior to 2040. The following table summarizes the findings for wastewater treatment and collection facilities.

Supply Projections

Reliability of Water Supplies

Upon review of the Heber Public Utility District Service Area Plan the Water Supplies available at present are sufficient for current projects in the community but once McCabe Ranch II Tract Map 994 has begun the Water Treatment Plant (WTP) will need to be re-evaluated and expanded to accommodate the additional water meters being added to the new community.

Performance Standards for WWTP & Sewer Collection Facilities

Wastewater Treatment Plant- The Performance standards and requirements for the Heber Municipal Wastewater Treatment Plant are governed by the National Pollution Discharge Elimination System (NPDES) discharge permit number CA0104370 adopted by the California Regional Water Quality Control Board, Colorado River Basin Region on June 23, 2011 by Board Order Number R7-2011- 0019. The NPDES permit under which the Heber Municipal Wastewater Treatment Plant operates became effective on July 1, 2011 and the facility was brought into compliance under the 2013 Expansion project. The NPDES permit establishes the Waste Discharge Requirements (WDR's) for the wastewater treatment plant. The NPDES permit establishes the rated capacity of the wastewater plant, discharge prohibitions, effluent limitations and discharge specifications, receiving water limitations, standard provisions for the operation of the wastewater treatment plant, monitoring and reporting program requirements, compliance requirements and special provisions. The NPDES discharge permit establishes the standards and criteria by which the Heber Municipal Wastewater Treatment Plant operates.²⁸

Sewer Collection System

The Heber Public Utility District utilizes standards established by the California Department of Public Health, the Water Environment Federation (WEF) and American Water Works Association (AWWA) to establish performance standards and criteria for the wastewater collection system. The Heber Public Utility District also adopted Standard Details and Specifications in 2004 addressing the technical requirements for the sanitary sewer collection system. Design capacity of a pipeline is the general calculated capacity of the pipeline using the Manning formula. For system analysis, peak dry weather flow (PDWF) does not exceed 75 percent of the design capacity of the pipeline. Accordingly, 25 percent of the pipeline capacity is reserved to accommodate peak wet weather flow (PWWF) incurred during wet weather conditions. The 25 percent reserve is therefore provided to account for groundwater infiltration and rainfall dependent inflow, plus additional sewer capacity reserve allowance. This 25 percent reserve contingency factor is a commonly used allowance in evaluating wastewater utilities.

²⁸ Reference by HPUD Service Area Plan Page 44

Table 24: Planned Projects to be Serviced by HPUD

Project	Proposed Land Uses	Status*
Imperial Center Specific Plan Area	Commercial, Public Facilities Approximately 14 acres of commercial left to be developed	Approved on 4/10/07 by I.C. Board of Supervisors Annexed to HPUD in 2012
McCabe Ranch II Specific Plan Area	Residential Commercial, Parks, Schools Approximately 459 acres remain undeveloped	Approved 8/10/10 by I.C. Board of Supervisors Pending HPUD Annexation
Heberwood Estates Tentative Tract Map	Residential (approximately 208 single family homes)	Last Tract Map yet to be recorded
Heber Foundation	Residential (multi-family)	Uncommitted
Heber Meadows Tentative Tract Map	Residential (approximately 105 single family homes)	Last Tract Map yet to be recorded

*Source: Imperial County Planning and Development Services Staff, October 10, 2017

Growth & Phasing Projections

It is the intent of the Heber Public Utility District to plan for growth via the orderly development of areas within the HPUD Sphere of Influence. Growth is influenced by location, land use restrictions, existing conditions, and availability of services. Orderly development is accomplished through planned improvements, phasing of service expansions and phasing of development projects. This Section of the Service Area Plan identifies the existing and planned land uses, the intricate development process, and the anticipated population growth which are all critical factors on how HPUD will service the community.

Existing Land Use

It is important to underscore Heber's uniqueness as a townsite. The townsite of Heber is located within an unincorporated area of Imperial County; therefore, it is not a city and does not dictate land use and zoning policies. Rather, the Heber Public Utility District works closely with Imperial County to ensure orderly planned development. Existing land uses within the District include residential, commercial and light industrial. The predominant land use within the District is residential, including low, medium and high-density housing. Light industrial land uses are located along an operational railroad which bisects the town in a northwest/southwest orientation. General commercial land uses are located along Main Street and along Heber's newly annexed area at the intersection of Highway 86 and Highway 111.

Table 25: Utility Providers

Utility	Provider
Water	Heber Public Utility District
Sewer	Heber Public Utility District
Storm Drainage	County of Imperial/Imperial Irrigation District
Natural Gas	Southern California Gas Company
Electricity	Imperial Irrigation District

Source: McCabe Ranch II Specific Plan Chapter 6.

Table 26: HPUD 2017 Service Area Plan Planned Developments

Development	Type	Total Additional Average Day Water Demand (gpd)	Total Additional Max Day Water Demand (gpd)	Total Additional Max Day Water Demand (gpd)
Imperial Center SPA	14 AC Commercial Remaining to be Developed	42,000	105,000	
McCabe Ranch II SPA	468 AC Residential Institutional and Commercial	430,460	1,076,150	1,179,080
Heberwood Estates TTM	Residential 208 single-family Homes	73,840	184,600	
Heber Foundation	Residential – Multi-family	Un-committed	Un-committed	Un-committed
Heber Meadows TTM	Residential – 105 Single-Family	37,275	93,188	
Total		2,846,420	7,116,050	8,539,260

Source: Table 3-A Planned Projects to be serviced by HPUD – HPUD 2017 Service Area Plan.

Water Shortage Contingency Planning

McCabe Ranch II Tract Map 994 is doing the following water contingency planning preparation should the IID need to pull water for the home:

- Create Water-efficient landscapes.
- Install water-efficient irrigation systems and devices such as soil moisture-based irrigation controls.
- Design buildings to be water efficient. Install water-efficient fixtures and appliances.
- Restrict watering methods (e.g., prohibit systems that supply water to non-vegetated surfaces) and control runoff.
- Reduce waste flows providing interior and/or exterior storage areas where appropriate for recyclable and green waste and adequate recycling containers located in public areas if such recycling programs are available.

Project Demand for McCabe Ranch II Tract Map 994

The proposed McCabe Ranch II Specific Plan is a 457,468-acre area located within the Imperial County General Plan's area that is designated as the Heber Specific Plan Area. The Specific Plan area is located north of the Community of Heber and South of the City of El Centro. The area is bordered by McCabe Road on the north, Dogwood Road on the east, State Route 86 on the west, and the western extension of Correll Road on the south.

The McCabe Ranch II Specific Plan was approved by the Imperial County Board of Supervisors on August 10, 2011 for the development of approximately 457 acres, including approximately 2,300 dwelling units, over 11 acres of commercial space, two (2) schools and 51.6 acres of open space. The project would be bordered by McCabe Road to the north, Dogwood Road to the east, State Route 86 on the west, and a western extension of Correll Road to the south. The project is within the Heber Public Utility District's sphere of influence and would potentially add 9,200 new residents. This project is currently pending annexation and a service agreement with the Heber Public Utility District. It is anticipated that this project will be substantially developed within the twenty to thirty years.

Table 27: Construction Water Numbers

CONCRETE NUMBERS								
Residential Uses	Square Footage of Home	Thickness of Slabs	Cubic Yards	Concrete needed (80 LB Bags)	Waste Accumulation (10% Contingency)	Total	Water Usage for Concrete (Gal)	Acre Feet
Flex Lot	4,000	0.42	62.2	2800	280	3080	2310	0.00708912
Traditional Lot	5,000	0.42	77.7	3500	350	3850	2887.5	0.0088614
Small Lot	5,000	0.42	77.7	3500	350	3850	2887.5	0.0088614
Mini-Estate Lot	9,000	0.42	140	6300	630	6930	5197.5	0.01595052
Estate Lot	20,000	0.42	311.1	14000	1400	15400	11550	0.0354456

Table 28: Water Demand Factors and Total Demand by Land Use

Land Use	Density	Daily Consumption Rate	Daily Consumption Rate per Unit
Conventional Residential			
Traditional Lot - Single Family (5,000 SF+)	3.42 people/unit	60 gallons/person; 150 gallons/unit (outdoor)	355 gallons
Small Lot - Single Family (4,000-5,000 SF)	3.42 people/unit	60 gallons/person; 125 gallons/unit (outdoor)	330 gallons
Flex Lot - Single Family (2,000-4,000 sf)	3.42 people/unit	60 gallons/person; 125 gallons/unit (outdoor)	330 gallons
High Density Multi-Family (25 units/ac)	3.42 people/unit	63 gallons/person; 150 gallons/unit (outdoor)	290 gallons
Estate Lots - Single Family (20,000 sf+)	3.42 people/unit	64 gallons/person; 150 gallons/unit (outdoor)	405 gallons
Mini Estate Lots - Single Family (9,000 sf)	3.42 people/unit	65 gallons/person; 150 gallons/unit (outdoor)	380 gallons
Non Residential			
Business Park	100% Domestic (8.4 AC)	3,000 gallons/ac	25,200 gallons
Commercial	100% Domestic (3.2 AC)	3,000 gallons/ac	9,600 gallons
Elementary School (McCabe)	600 Students; 30 Staff members; 40% grass/turf	25 Gallons/student; 20 gallons/staff; 5,000 gallons/ac	15,000 gallons (students); 600 gallons (staff); 26,000 gallons (grass)
Total Elementary School (McCabe)	-	-	41,600 gallons
Parks (open)	85% grass/turf	5,000 gallons/AC	265,100 gallons
Roads	15% grass/turf (9.61 AC)	5,000 gallons/AC	48,050 gallons
Total Non-Residential Uses			393,950 gallons

Land Use	Density	Daily Consumption Rate	Daily Consumption Rate per Unit	Total Units	Total Water Used Per Day at Full Build Out (Residential) in gallons
Conventional Residential					
Traditional Lot - Single Family (5,000 SF+)	3.42 people/unit	60 gallons/person; 150 gallons/unit (outdoor)	355 gallons	533	189,215
Small Lot - Single Family (4,000-5,000 SF)	3.42 people/unit	60 gallons/person; 125 gallons/unit (outdoor)	330 gallons	257	84,810
Flex Lot - Single Family (2,000-4,000 sf)	3.42 people/unit	60 gallons/person; 125 gallons/unit (outdoor)	330 gallons	245	80,850
High Density Multi-Family (25 units/ac)	3.42 people/unit	63 gallons/person; 150 gallons/unit (outdoor)	290 gallons	531	153,990
Estate Lots - Single Family (20,000 sf+)	3.42 people/unit	64 gallons/person; 150 gallons/unit (outdoor)	405 gallons	25	10,125
Mini Estate Lots - Single Family (9,000 sf)	3.42 people/unit	65 gallons/person; 150 gallons/unit (outdoor)	380 gallons	19	7,220
Total				1610	526,210

Table 29: Total Operational Water Use at Full Build Out

Total Residential Water Consumption per Day	526,210 G.16
Total Non-Residential Water Consumption use Per Day	393,950 GPD
Total Projected Operational Water Use at Build Out	920,160 GPD

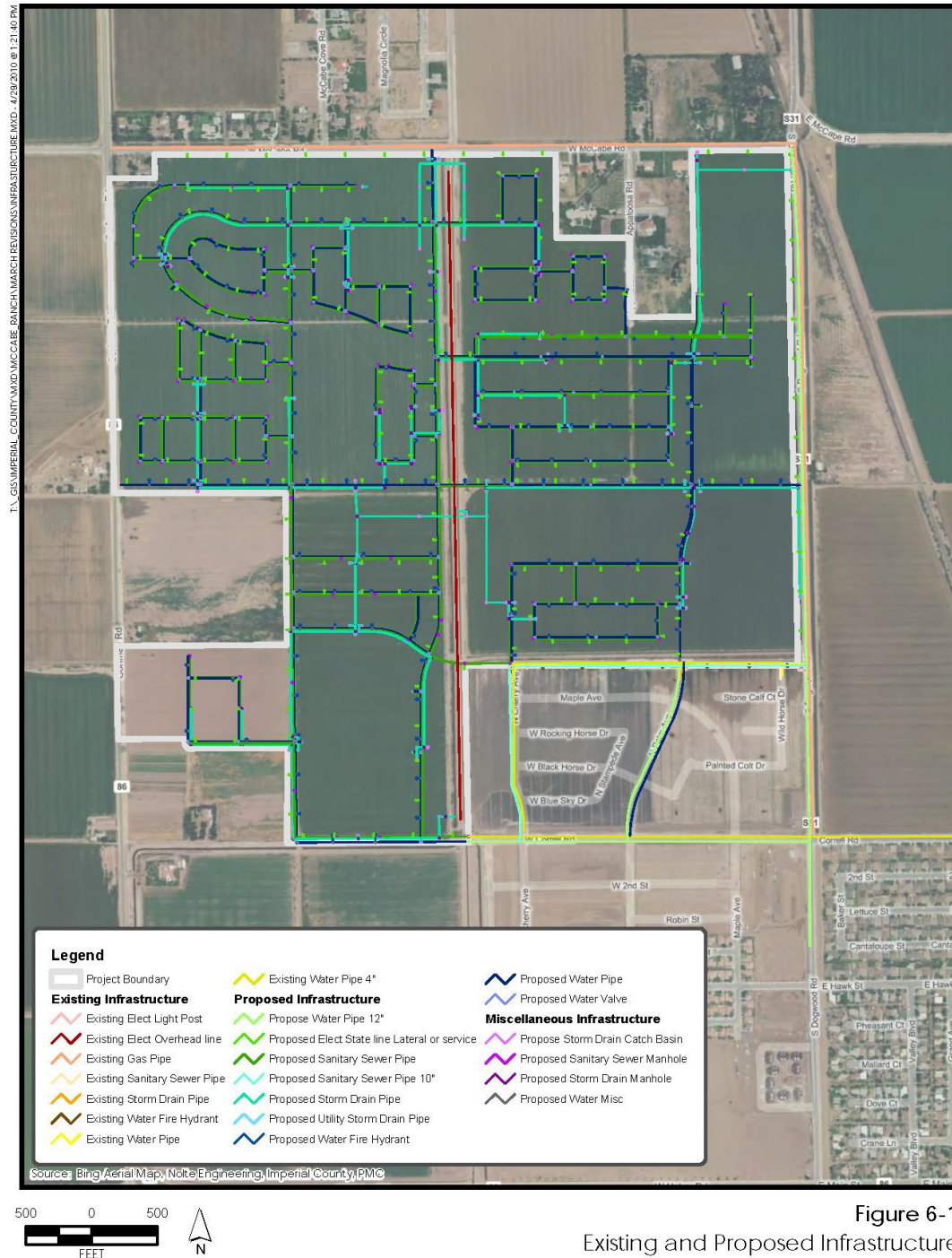
Table 30: Detailed Development By Phase, McCabe Ranch II Tract Map 994 & Projected Operation Water By Phase

PROPOSED LAND USES		PHASE 1 (a)				PHASE 2 (a)				PHASE 3 (a)						TOTALS	TOTALS Water Consumption
		1A	1 A Water Consumptio n	1B	1 A Water Consumption	2A	2 A Water Consumption	2B	2 B Water Consumption	3A	3A Water Consumption	3B	3B Water Consumption	3 C	3 C Water Consumption		
Development Year		2025 - 2026		2026 -2027		2029 - 2031		2032 - 2033		2034 - 2035		2036 - 2037		2038 - 2039			
RESIDENTIAL DEVELOPMENT																DUs	
Single-Family	Density																
Traditional Single a Family	5 DU/AC	-0-	-0-			160	56,800	134	44,220	151	49,830	-0-		88	29,040	533	189,215
Small Lot Single- Family	7 DU/AC	-0-	0	157	51,810	100	33,000	-0-		-0-		-0-	-0-		-0-	257	84,810
Flex Lot Single-Family	9 DU/AC	157	-51,810-			-0-		-0-		-0-		88	29,040		-0-	245	80,850
Mini Estate	3 DU/AC	-0-	-0-			-0-		-0-		-0-		-0-		19	7,220	19	7,220
Estate Lot	2 DU/AC	-0-	-0-			-0-		25	10,125	-0-		-0-	-0-		-0-	25	10,125
Single-Family Subtotal		157	51,810	157	51,810	260	89,800	159	54,345	151	49,830	88	29,040	107	36,260	1,079	372,220
Multi-Family	Density																
Multi-Family 1 (NW Corner)	20 DU/AC	-0-	-0-			-0-		196	56,840	-0-		-0-	-0-		-0-	196	56,840
Multi-Family 2 (NE Corner)	19 DU/AC	-0-	-0-			-0-		-0-		-0-		335	97,150-0-		-0-	335	97,150
Multi-Family 3	22 DU/AC	-0-	-0-			-0-		-0-		-0-		-0-	-0-		-0-	0	0
Multi-Family Subtotal		-0-	-0-	-0-		-0-		-0-		151		335		-0-	-0-	-0-	153,990
TOTAL RESIDENTIAL		157	51,810	157	51,810	260		355		151		423		107		1,610	526,210
NON - RESIDENTIAL DEVELOPMENT																Acres	
McCabe Elementary (K-5) School Site		-0-	-0-	-0-		12.3	41,600	-0-		-0-		-0-		-0-	-0-	12.3	41,600
Commercial		-0-	-0-	-0-		-0-		-0-		-0-		-0-		3.14	25,200	3.14	25,200
Business Park		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	- 0 -	0
Park/Detention/Greenbelt (inc. IID Easement)		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	38.78	265,100
Major Collector Roads		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	48.3	48,050
Total Water Consumption Full Build Out																	906,160

PROPOSED LAND USES		PHASE 1 (a)				PHASE 2 (a)				PHASE 3 (a)						TOTALS	TOTALS Water Consumption
		1A	1 A Water Consumption	1B	1 A Water Consumption	2A	2 A Water Consumption	2B	2 B Water Consumption	3A	3A Water Consumption	3B	3B Water Consumption	3 C	3 C Water Consumption		
Development Year		2025 - 2026		2026 -2027		2029 - 2031		2032 - 2033		2034 - 2035		2036 - 2037		2038 - 2039			
RESIDENTIAL DEVELOPMENT																DUs	
Single-Family	Density																
Traditional Single a Family	5 DU/AC	-0-	-0-			160	19,152	134	16,040	151	18,075	-0-		88	10,534	533	63,801
Small Lot Single-Family	7 DU/AC	-0-	0	157	18,793-	100	11,970	-0-		-0-		-0-	-0-		-0-	257	30,763
Flex Lot Single-Family	9 DU/AC	157	-18,793-			-0-		-0-		-0-		88	10,534		-0-	245	29,327
Mini Estate	3 DU/AC	-0-	-0-			-0-		-0-		-0-		-0-		19	2,274	19	2,274
Estate Lot	2 DU/AC	-0-	-0-			-0-		25	10,125	-0-		-0-	-0-		-0-	25	10,125
Single-Family Subtotal		157	18,793-	157	18,793-	260	31,122	159	54,345	151	18,075	88	10,534	107	12,808	1,079	136,290
Multi-Family	Density																
Multi-Family 1 (NW Corner)	20 DU/AC	-0-	-0-			-0-		196	23,461	-0-		-0-	-0-		-0-	196	23,461
Multi-Family 2 (NE Corner)	19 DU/AC	-0-	-0-			-0-		-0-		-0-		335	40,100		-0-	335	40,100
Multi-Family 3	22 DU/AC	-0-	-0-			-0-		-0-		-0-		-0-	-0-		-0-	0	63,561
Multi-Family Subtotal		-0-	-0-	-0-	0	-0-	0	196	23,461	0		335	40,100	-0-	-0-	531	63,561
TOTAL RESIDENTIAL		157	18,793-	157	18,793-	260	31,122	355	77,806	151	18,075	423	50,634	107	12,808	1,610	199,851
NON - RESIDENTIAL DEVELOPMENT																Acres	
McCabe Elementary (K-5) School Site		-0-	-0-	-0-		12.3**	22,050	-0-		-0-		-0-		-0-	25,200-	12.3	25,200
Commercial		-0-	-0-	-0-		-0-		-0-		-0-		-0-		3.14**	N/A	3.14**	
Business Park		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	- 0 -	0
Park/Detention/Greenbelt (inc. IID Easement)		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	38.78	0
Major Collector Roads		-0-	-0-	-0-		-0-		-0-		-0-		-0-		-0-	-0-	48.3	0
Total Wastewater Consumption Full Build Out		157	18,793	157	18,793	260	49,626	514	132,151	151	18,075						225,051

Table 31: Detailed Development By Phase, McCabe Ranch II Tract Map 994 & Projected Operation Wastewater By Phase

Figure 13: Proposed & Existing Facilities

Figure 6-1
Existing and Proposed Infrastructure

County of Imperial (Lead Agency) Findings

IID serves as the regional wholesale water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, industrial, environmental and recreational water users within its water service area. Heber Public Utility District serves as the agency responsible with land use authority over the proposed project. Heber Public Utility District Water Assessment findings are summarized as follows, based on the information contained herein and as supported by IID water supply data:

1. IID's annual entitlement to consumptive use of Colorado River water is capped at 3.1 MAF less water transfer obligations, pursuant to the QSA and Related Agreements. Under the terms of the CRWDA, IID is implementing efficiency conservation measures to reduce net consumptive use of Colorado River water needed to meet its QSA/Transfer Agreements obligations while retaining historical levels of agricultural productivity.
2. In 2024 IID consumptively used 2,311,905 AF of Colorado River water (volume at Imperial Dam); 2,103,768 AF were delivered to customers (including recreational and environmental water deliveries) of which 1,911,796 AF or 95 percent went to agricultural users as per IID's Water Balance run on 3/28/2025.
3. Reduction of IID's net consumptive use of Colorado River water under the terms of the Colorado River Water Delivery Agreement is to be the result of efficiency conservation measures. Crop water use in the Imperial Valley will not decline under these conditions, however IID operational spill and tailwater from field runoff will decline as efficiency conservation measures are implemented, impacting the Salton Sea.
4. The dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water alone are not sufficient to assure water availability for the Project. The prolonged drought conditions on the Colorado River Basin have made it increasingly likely that the water supply of IID may be disrupted, in dry years or/and under shortage conditions. Mexico, Arizona and Nevada, which have lower priority than IID, have already experienced Tier 1 and Tier 2a reductions in 2022 as a result of the declared Colorado River water shortage.
5. Due to ongoing Colorado River drought conditions, Lake Mead's declining elevation, reduced inflows from Lake Powell, and the suspension of the federal Inadvertent Overrun and Payback Policy, which eliminates IID's ability to overrun its 3.1 MAF annual entitlement during water shortage conditions, the IID Board has implemented an annual apportionment program (otherwise known as the Equitable Distribution Plan or EDP).
6. IID's EDP apportions the available water supply among all its water users equitably and among three water user categories based on historical use: 1) agricultural water users, 2) commercial/industrial water users, and 3) potable water users. Apportionment into these categories is initiated after deducting from the available water supply water for operational system needs, system conservation yields, environmental mitigation requirements, recreational uses, and similar unmeasured small pipe account water uses. See Attachment B -Equitable Distribution Plan.
7. Historically, IID has never been denied the right to use the annual volume of water it has available for its consumptive uses under its entitlement. Nevertheless, IID is participating in discussions for possible actions in response to continued extreme drought on the Colorado River.
8. The proposed Project has an estimated total Construction water demand of 87 AF or 4 AFY amortized over a 20-year term (for all delivery gates for the Project). Thus, the proposed Project demand is a 948

decrease of 948 AFY from the historical 10-year average or 99 percent (99 %), 948 AFY decrease from the historic 10-year average annual delivery for agricultural uses at the proposed Project site. Over the projects life the project has conserved water causing a reduction since 2008. However the proposed project will use less water than the amount capped for agricultural use at 5 AF/AC²⁹ It is important to note that the project at full build out will consume a total of 1,022 Acre Feet per year for residential and nonresidential land uses, the project water needs have been taken into account in the approved 2017 Heber Public Utility Districts Service Area Plan.

9. The Project's water delivery will be covered under the [Schedule 7 General Industrial Use](#). In the event that IID determines that the proposed Project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will also need to enter into an IWSP Water Supply Agreement with IID. In which case, the proposed Project would use .02 percent (.02%) of the 18,620 AFY of IWSP water.
10. The Project is required to enter into a Water Supply Agreement with IID for the 4 AFY of projected construction and mitigation water demand. Under any fully executed water supply agreement, IID has the capacity to procure or develop water supplies for the Project through the implementation of policies, the construction of water conservation projects and/or the implementation or expansion of water conservation programs. Any costs associated with this water supply development will be the responsibility of the Project Owner, as outlined in the corresponding water supply agreement, along with other terms and conditions, including the requisite environmental permitting.
11. Based on the Environmental Impact Report (EIR) prepared for this proposed Project pursuant to the CEQA, California Public Resources Code sections 21000, *et seq.* (SCH No. _____), Heber Public Utility District hereby finds that the IID projected water supply, together with water conservation measures required, Choose an item, sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 20-year Water Supply Assessment period.
12. The Heber Public Utility water system supplies water for domestic purposes to approximate 6,600 consumers through a total of about 1,530 water service connections. The 2 million gallon per day (MGD) water treatment system operates 24 hours daily based on system demand. Due to the projected projects planned in the next 20 years. HPUD will be required to submit an Urban Water Management Plan at the point of 3,000 service connections.
13. Heber receives raw water from the Imperial Irrigation District (IID), from the Central Main Canal through the Dogwood Canal to Gate 37A. Raw water is allowed to settle in 3 lined settling basins with a combined capacity of 5.8 million gallons. Water is pumped from the third settling basin and polyferric sulfate, a coagulant and Polymer, a coagulant aid is added and is mixed via static mixer. The water then flows through one of two U.S. Filter Co. Micro Floc Water Treatment System units.³⁰
14. HPUD has a capacity to treat 4.0 million gallons per day. McCabe Ranch II Tract Map 994 will increase the current demand by 906,160 gpd 2.8 AF at full build out in the projected 20 years. The project has been

²⁹ [2022 Equitable Distribution Plan & Colorado River Operating Conditions](#)

³⁰ <https://heber.ca.gov/water-treatment-distribution#:~:text=The%20Heber%20Public%20Utility%20water,daily%20based%20on%20system%20demand.>

incorporated into the HPUD Service Area plan, therefore HPUD can meet the needs of the water for this project.

15. HPUD has the capacity to treat 1.2 MGD, through the wastewater treatment system. McCabe Ranch II Tract Map 994 will increase the demand by 225,051 GPD at full build out in the projected 20 years. The project has been incorporated within the HPUD Service Area Plan, therefore HPUD can meet the needs of the water for this project.

Assessment Conclusion

This Water Supply Assessment has determined that IID water supply is adequate for the **McCabe Ranch II Tract Map 994** (proposed Project). The Imperial Irrigation District's IWSP for Non-Agricultural Projects may dedicate up to 25,000 AF of IID's annual **conserved** water supply to serve new projects. As of **January 2025**, a total of **18,620 AF** per year remains available for conservation for new projects providing reasonably sufficient supplies for new non-agricultural water users that enter into a Water Supply Agreement with IID **over the next 5-year period, at minimum**. **Heber Public Utility District** estimates a cumulative, non-agricultural project water supply demand increase of up to **40,000 AFY** within the foreseeable 20-year planning period, however, all new non-agricultural projects, including McCabe Ranch II Tract Map 994, are required to mitigate their respective water supply demand via conservation programs or conservation projects in order to receive future water apportionments.

New, non-agricultural projects may be susceptible to delivery cutbacks when an EDP Apportionment is exhausted, thus all approved projects require best management practices and water use efficiency at all times. Given the prolonged drought conditions and recent communication to IID from the Department of the Interior, reductions to all basin contractors, including IID and its water customers, are increasingly likely. If such reductions were to come into effect within an approved project's 20-year life, the Applicants are to work with IID to ensure any anticipated reduction can be managed via the means identified herein or other equivalent measures.

Under an authorized water supply agreement, McCabe Ranch II Tract Map 994 will be required to acknowledge and accept as a condition of water service that to the extent that IID receives an order or directive from a governmental authority, having appropriate jurisdiction, that reduces the total volume of water available to IID from the Colorado River during all or any part of their water service agreement, IID may reduce the water service agreement amount, as directed by the IID Board, as a proportionate reduction of the total volume of water available to IID. This reduction is separate from and in addition to any allocation authorized pursuant to the EDP.

The Project's operational water demand of approximately 4 AFY represents .02 % of the unallocated supply **that may be set aside under the IWSP for non-agricultural projects, and approximately .02 percent (.02 %)** of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed Project represents a **99 % decrease** from the 10-year average historic average agricultural water use for **2014-2023** at the proposed Project site, a decrease in water use of 954 AFY at full build-out.

For all the reasons described herein, the historical stability of the IID water supply, the amount of foreseeable water available, along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers suggest that **McCabe Ranch II Tract Map 994** water needs **will** be reasonably met for the next 20 years as assessed for compliance under SB-610.

DRAFT

Resources and References

1. California Department of Water Resources. (2003). [Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001](#) to assist water suppliers, cities, and counties in integrating water and land use planning.
2. Imperial County Planning and Development Services. (2008). Imperial County General Plan 2008 Update. El Centro, CA. [General Plan | Imperial County Planning & Development Services \(icpds.com\)](#), retrieved, 2021
3. Imperial Irrigation District. Website: [Equitable Distribution Plan](#).
4. Imperial Irrigation District Website: [2021 Water Conservation Plan](#). (2021). Imperial Irrigation District 2021 Water Conservation Plan. Imperial, CA.
5. Imperial Irrigation District. (2024). IID [Interactive GIS Water Service Area Map](#). Imperial, CA.
6. Imperial Irrigation District. (2024). [Interim Water Supply Policy for Non-Agricultural Projects](#). Imperial, CA
7. Imperial Irrigation District. (2012). [Temporary Land Conversion Following Policy \(TLFCP\) for Water Conservation Yield](#) Water conservation yield attributable to land removed from agricultural production and temporarily fallowed. Updated March 27, 2018.
8. Imperial Irrigation District Water Department. (2013). [Colorado River Water Accounting and Conservation Commitments Update](#). Tina Anderholt Shields, PE. Colorado River Resources Manager Imperial, CA.
9. Imperial Irrigation District. (2023). [2023 Water & QSA Implementation Report](#). Imperial, CA
10. Imperial Irrigation District. (2021). Consultation with Justina Gamboa-Arce., Water Conservation Planner. Imperial, CA.
11. Imperial Irrigation District. (2021). [Temporary Land Following Conversion Policy. \(TLFCP\)](#).
12. Imperial Irrigation District. (2024). [2024 IID SWRCB Report](#)
13. United States Bureau of Reclamation Lower Colorado Region Website: [Boulder Canyon Operations Office – Programs and Activities](#), Lower Colorado River Water Accounting, Water Accounting Reports (1964 - 2015). Compilation of Records in Accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California Dated March 9, 1964: Calendar Years 1964 - 2015 Boulder City, NV.
14. McCabe Ranch II Tract Map 994 (TR00094); Specific Plan Amendment #24-0001 Project Description

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: IID 2023 Equitable Distribution Plan, revised July 26, 2023 ([retrieve from iid.com](#))

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Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects³¹

1.0 Purpose.

Imperial Irrigation District (the District) is developing an Integrated Water Resources Management Plan (IWRMP) ^{26F}³² that will identify and recommend potential programs and projects to develop new water supplies and new storage, enhance the reliability of existing supplies, and provide more flexibility for District water department operations, all in order to maintain service levels within the District's existing water service area. The first phase of the IWRMP is scheduled to be completed by the end of 2009 and will identify potential projects, implementation strategies and funding sources. Pending development of the IWRMP, the District is adopting this Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, as defined below, in order to address proposed projects that will rely upon a water supply from the District during the time that the IWRMP is still under development. It is anticipated that this IWSP will be modified and/or superseded to take into consideration policies and data developed by the IWRMP.

2.0 Background.

The IWRMP will enable the District to more effectively manage existing water supplies and to maximize the District's ability to store or create water when the available water supplies exceed the demand for such water. The stored water can be made available for later use when there is a higher water demand. Based upon known pending requests to the District for water supply assessments/verifications and pending applications to the County of Imperial for various Non-Agricultural Projects, the District currently estimates that up to 50,000 acre feet per year (AFY) of water could potentially be requested for Non-Agricultural Projects over the next ten to twenty years. Under the IWRMP the District shall evaluate the projected water demand of such projects and the potential means of supplying that amount of water. This IWSP currently designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. Proposed Non-Agricultural projects may be required to pay a Reservation Fee, further described below. The reserved water shall be available for other users until such Non-Agricultural projects are implemented and require the reserved water supply. This IWSP shall remain in effect pending the approval of further policies that will be adopted in association with the IWRMP.

3.0 Terms and Definitions.

3.1 Agricultural Use. Uses of water for irrigation, crop production and leaching.

3.2 Connection Fee. A fee established by the District to physically connect a new Water User to the District water system.

3.3 Industrial Use. Uses of water that are not Agricultural or Municipal, as defined herein, such as manufacturing, mining, cooling water supply, energy generation, hydraulic conveyance, gravel washing, fire protection, oil well re-pressurization and industrial process water.

3.4 Municipal Use. Uses of water for commercial, institutional, community, military, or public water systems, whether in municipalities or in unincorporated areas of Imperial County.

³¹ IID Board Resolution 31-2009. Interim Water Supply Policy for New Non-Agricultural Projects. September 29, 2009. < [IID Interim Water Supply Policy for Non-Agricultural Projects](#) >

³² The 2009 Draft IID IWRMP has been superseded by the October 2012 Imperial IRWMP, which incorporates the conditions of the IWSP by reference.

3.5 Mixed Use. Uses of water that involve a combination of Municipal Use and Industrial Use.

3.6 Non-Agricultural Project. Any project which has a water use other than Agricultural Use, as defined herein.

3.7 Processing Fee. A fee charged by the District Water Department to reimburse the District for staff time required to process a request for water supply for a Non-Agricultural Project.

3.8 Reservation Fee. A non-refundable fee charged by the District when an application for water supply for a Non-Agricultural Project is deemed complete and approved. This fee is intended to offset the cost of setting aside the projected water supply for the project during the period commencing from the completion of the application to start-up of construction of the proposed project and/or execution of a water supply agreement. The initial payment of the Reservation Fee will reserve the projected water supply for up to two years. The Reservations Fee is renewable for up to two additional two-year periods upon payment of an additional fee for each renewal.

3.9 Water Supply Development Fee. An annual fee charged to some Non-Agricultural Projects by the District, as further described in Section 5.2 herein. Such fees shall assist in funding IWRMP or related water supply projects,

4.0 Water User. A person or entity that orders or receives water service from the District.

4.0. CEQA Compliance.

The responsibility for CEQA compliance for new development projects within the unincorporated area of the County of Imperial attaches to the County of Imperial or, if the project is within the boundaries of a municipality, the particular municipality, or if the project is subject to the jurisdiction of another agency, such as the California Energy Commission, the particular agency. The District will coordinate with the County of Imperial, relevant municipality, or other agency to help ensure that the water supply component of their respective general plans is comprehensive and based upon current information. Among other things, the general plans should assess the direct, indirect and cumulative potential impacts on the environment of using currently available water supplies for new industrial, municipal, commercial and/or institutional uses instead of the historical use of that water for agriculture. Such a change in land use, and the associated water use, could potentially impact land uses, various aquatic and terrestrial species, water quality, air quality and the conditions of drains, rivers and the Salton Sea.

4.2 When determining whether to approve a water supply agreement for any Non-Agricultural Project pursuant to this IWSP, the District will consider whether potential environmental and water supply impacts of such proposed projects have been adequately assessed, appropriate mitigation has been developed and appropriate conditions have been adopted by the relevant land use permitting/approving agencies, before the District approves any water supply agreement for such project.

5.0. Applicability of Fees for Non-Agricultural Projects.^{27F33}

5.1 Pursuant to this Interim Water Supply Policy, applicants for water supply for a Non-Agricultural Project shall be required to pay a Processing Fee and may be required to pay a Reservation Fee as shown in Table A. All Water

³³ The most recent fee schedules can be found in a link at IID/Water/ Municipal, Industrial and Commercial Customers; or visit by URL at [Imperial Irrigation District : Water Rate Schedules](#)

Users shall also pay the applicable Connection Fee, if necessary, and regular water service fees according to the District water rate schedules, as modified from time to time.

5.2 A Non-Agricultural Project may also be subject to an annual Water Supply Development Fee, depending upon the nature, complexity, and water demands of the proposed project. The District will determine whether a proposed Non-Agricultural Project is subject to the Water Supply Development Fee for water supplied pursuant to this IWSP as follows:

5.2.1. A proposed project that will require water for Municipal Use shall be subject to an annual Water Supply Development Fee as set forth in Table B if the projected water demand for the project is in excess of the project's estimated population multiplied by the District-wide per capita usage. Municipal Use projects without an appreciable residential component will be analyzed under sub-section 5.2.3.

5.2.2. A proposed project that will require water for an Industrial Use located in an unincorporated area of the County of Imperial shall be subject to an annual Water Supply Development Fee as set forth in Table B.

5.2.3. The applicability of the Water Supply Development Fee set forth in Table B to Mixed Use projects, Industrial Use projects located within a municipality, or Municipal Use projects without an appreciable residential component, will be determined by the District on a case-by-case basis, depending upon the proportion of types of land uses and the water demand proposed for the project.

5.3. A proposed Water User for a Non-Agricultural Projects may elect to provide some or all of the required water supply by paying for and implementing some other means of providing water in a manner approved by the District, such as conservation projects, water storage projects and/or use of an alternative source of supply, such as recycled water or some source of water other than from the District water supply. Such election shall require consultation with the District regarding the details of such alternatives and a determination by the District, in its reasonable discretion, concerning how much credit, if any, should be given for such alternative water supply as against the project's water demand for purposes of determining the annual Water Supply Development Fee for such project.

5.4 The District Board shall have the right to modify the fees shown on Tables A and B from time to time.

5.0 Water Supply Development Fees collected by the District under this IWSP shall be accounted for independently, including reasonable accrued interest, and such fees shall only be used to help fund IWRMP or related District water supply projects.

6.0 Any request for water service for a proposed Non-Agricultural Project that meets the criteria for a water supply assessment pursuant to Water Code Sections 10910-10915 or a water supply verification pursuant to Government Code Section 66473.7 shall include all information required by Water Code Sections 10910 –10915 or Government Code Section 66473.7 to enable the District to prepare the water supply assessment or verification. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

8. Any request for water service for a proposed Non-Agricultural Project that does not meet the criteria for a water supply assessment pursuant to Water Code Section 10910-10915 or water supply verification pursuant to Government Code Section 66473.7 shall include a complete project description with a detailed map or diagram

depicting the footprint of the proposed project, the size of the footprint, projected water demand at full implementation of the project and a schedule for implementing water service. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

9. All other District rules and policies regarding a project applicant or Water User's responsibility for paying connection fees, costs of capital improvements and reimbursing the District for costs of staff and consultant's time, engineering studies and administrative overhead required to process and implement projects remain in effect.

10. Municipal Use customers shall be required to follow appropriate water use efficiency best management practices (BMPs), including, but not limited to those established by the California Urban Water Conservation Council BMP's (see <http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx>), or other water use efficiency standards, adopted by the District or local government agencies.

11. Industrial Use customers shall be required to follow appropriate water use efficiency BMP's, including but not limited to those established by the California Urban Water Conservation Council and California Energy Commission, as well as other water use efficiency standards, adopted by the District or local government agencies.

12. The District may prescribe additional or different BMPs for certain categories of Municipal and Industrial Water Users.

ATTACHMENT B: IID EQUITABLE DISTRIBUTION PLAN³⁴

Adopted December 11, 2007

Revised November 18, 2008

Revised April 07, 2009

Revised April 23, 2013

Revised May 14, 2013

Revised October 28, 2013

Revised June 21, 2022

Revised July 26, 2023 (attach)

³⁴ Equitable Distribution Plan documents. July 26, 2023 <https://www.iid.com/water/rules-and-regulations/equitable-distribution>

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