2025

URBAN WATER MANAGEMENT PLAN

This Page Intentionally Left Blank

Table of Contents

Page No.

APPENDICES

APPENDIX A

- Water Conservation Act of 2009 (SB X7-7)
- Urban Water Management Planning Act

APPENDIX B

- Public Agency Notification (Additional notices to be added when complete)
- Public Hearing Notice (Proof of publication to be added when received)
- Minutes of June 17, 2026 Board Meeting (To be added once approved)

APPENDIX C

- Department of Water Resources 2025 Urban Water Management Plan Checklist
- Urban Water Management Plan Standardized Tables

APPENDIX D

- Resolution No. 26-xx Water Supply Response Program
- Resolution No. 20-34 Permanent Special Agricultural Water Rate Program

APPENDIX E

- Reporting on Reduced Delta Reliance

APPENDIX F

- Vista Irrigation District Multi-Jurisdictional Hazard Mitigation Plan (2023)

APPENDIX H

- Reporting of Energy Intensity

This Page Intentionally Left Blank

TABLES

FIGURES

ABBREVIATIONS

2020 Plan	2020 Urban Water Management Plan
2025 Plan	2025 Urban Water Management Plan
AB	Assembly Bill
AAC	All-American Canal
Act	Urban Water Management Planning Act
AF	acre-feet
AF/YR	acre-feet per year
BMPs	Best Management Practices (Water Conservation)
CALFED	CALFED Bay-Delta Program
CC	Coachella Canal
CEQA	California Environmental Quality Act
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Information System
CVWD	Coachella Valley Water District
CRA	Colorado River Aqueduct
CUWCC	California Urban Water Conservation Council
DBP	Disinfection Byproduct
DCP	Drought Contingency Plan
District	Vista Irrigation District
DMM	Demand Management Measures
DMP	Drought Management Plan
DPH	Department of Public Health
DRA	Drought Risk Assessment
DWA	Desert Water Agency
DWR	Department of Water Resources (State of California)
EWPCF	Encina Wastewater Pollution Control Facility
EPA	Environmental Protection Agency
ERP	Emergency Response Plan
ESP	Emergency Storage Project
ETo	Evapotranspiration
FY	Fiscal Year
GPCD	gallons per capita per day
GSA	Groundwater Sustainability Agency
GSP	Groundwater Sustainability Plan
HAB	Harmful Algal Bloom
ICP	Integrated Contingency Plan
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
lb/day	pounds per day
M&I	municipal & industrial

MAF	million acre-feet
MAF/YR	million acre-feet per year
MCL	California Maximum Contaminant Level
Metropolitan	Metropolitan Water District of Southern California
mg/l	milligrams per liter
MGD	million gallons per day
MOU	Memorandum of Understanding - Urban Water Conservation in CA
NCWA	North County Water Agencies
pCi/l	picocuries per liter
PSAWR	Permanent Special Agricultural Water Rate
QSA	Quantification Settlement Agreement
Reclamation	United States Department of the Interior, Bureau of Reclamation
RO	reverse osmosis
ROD	Record of Decision
SANDAG	San Diego Association of Governments
SB	Senate Bill
SBX 7-7	Senate Bill X7-7
SCADA	Supervisory Control and Data Acquisition
SDWA	Safe Drinking Water Act
SEMS	Standardized Emergency Management System
Settlement Act	San Luis Rey Indian Water Rights Settlement Act
Settlement Agreement	San Luis Rey Indian Water Rights Settlement Agreement
SGMA	Sustainable Groundwater Management Act
Splash Lab	Splash Lab Mobile Science Lab
State Board	State Water Resources Control Board
SWA	Source Water Assessment
SWRP	Shadowridge Water Reclamation Plant
SWP	State Water Project
TCP	trichloropropane
TDS	total dissolved solids
UWMP	Urban Water Management Plan
µg/l	micrograms per liter
VID	Vista Irrigation District
Warner Basin	Warner Valley Groundwater Basin
Water Authority	San Diego County Water Authority
WC	California Water Code
WRMP	Water Reclamation Master Plan
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan
WSDRP	Water Shortage and Drought Response Plan
WSRP	Water Supply Response Program
WTP	Water Treatment Plan

EXECUTIVE SUMMARY

Vista Irrigation District (District) has prepared its 2025 Urban Water Management Plan (2025 Plan) in accordance with the Urban Water Management Planning Act (UWMP Act). The District's 2025 Plan serves as the long-term planning document that will help to ensure a reliable water supply for the District. This Executive Summary satisfies the requirement of California Water Code (Water Code) Section 10630.5 to include a simple, lay description of information necessary to provide a general understanding of the 2025 Plan, including a description of District water supplies, challenges ahead, and strategies for managing reliability risks.

1. CHAPTER 1 – INTRODUCTION AND OVERVIEW

The Water Code requires all urban water suppliers in the state serving more than 3,000 customers to prepare urban water management plans and update them every five years. The District provides water service to roughly 135,000 people through 28,900 accounts in the City of Vista, and portions of the cities of San Marcos, Escondido, Oceanside, and unincorporated areas of the County of San Diego.

The Water Code requires urban water suppliers, such as the District, to analyze the reliability of water supplies to meet water use demands in a single-dry year and over an extended drought period of five years or longer and prepare a plan to address water shortages. The 2025 Plan outlines the District's strategies to manage reliability through 2050.

2. CHAPTER 2 – PLAN PREPARATION

While the 2025 Plan includes specific information about its water supplies, the District also relies on the Urban Water Management Plans (UWMPs or Plans) submitted by its water wholesalers, the San Diego County Water Authority (Water Authority) and the Metropolitan Water District of Southern California (Metropolitan) and includes details on their supplies that contribute to the reliability of water supplies for the District.

The District coordinated the preparation of its 2025 Plan with the Water Authority and additional appropriate local agencies, including other water suppliers and public agencies. In accordance with the Act, the District notified cities and the county within its service area 60 days prior to holding a public hearing that it was preparing a 2025 Plan.

Information reported in the 2025 Plan is on a fiscal year (FY) basis (beginning July 1 and ending June 30) and using acre-feet (AF) as its unit of measure.

3. SYSTEM DESCRIPTION

Chapter 3 provides an overview of the District, including climatic, social and demographic characteristics of the service area. Chapter 3 also outlines the District's relationships with water wholesalers and other local water agencies, and the sources of information used in water supply planning management.

4. SYSTEM WATER USE

Chapter 4 outlines the District's system water use. The District is considered a potable water supplier only for purposes of the 2025 Plan; it does not own and maintain a recycled water distribution system and does not have recycled water demand. Water use in the District's service area falls into two classes of service, municipal and industrial (residential and non-residential) and agriculture. Municipal and industrial (M&I) uses currently constitute approximately 96 percent of the District's water consumption.

Information on past and current water use by sector, system water losses, water use for lower income households, future water savings, as well as projected water use demands by sector are covered in Chapter 4. The District collaborated with the Water Authority on the baseline demand forecast to determine projected demands used in the 2025 Plan as well as the estimated future water saving quantities.

The UWMP Act requires that urban water suppliers consider climate change in their water use and supply projections for their long-term water service reliability assessments. Sections 7.3 and 7.4 address climate variations on projected supplies and demands under climate change conditions and anticipated regulatory changes.

5. BASELINE AND TARGETS

In November 2009, the State of California enacted Senate Bill X7-7 (SBX 7-7) that mandated retail urban water agencies within the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020 (referred to as "20 X 2020") and interim savings of 10 percent by 2015. Chapter 5 includes the District's 2020 urban water use target and actual 2020 gallons per capita per day (GPCD) showing the District met its target in 2020.

6. SYSTEM SUPPLIES

Chapter 6 contains documentation on the existing and planned water supplies being developed by the District and its wholesale water suppliers, the Water Authority and Metropolitan. Specific documentation verifying Water Authority and Metropolitan supplies can be found in their respective urban water management plans.

The District currently has several water sources, including purchased (which includes imported and desalinated seawater) and local water supplies. Purchased water supplies are conveyed to the District by Metropolitan and/or the Water Authority and may be derived from sources developed by either agency.

Historically, the Water Authority has relied on imported water supplies purchased from Metropolitan to meet the needs of its 22 member agencies. Metropolitan's supplies come from two primary sources, the State Water Project (SWP) and the Colorado River. After experiencing severe shortages from Metropolitan during the 1987–1992 drought, the Water Authority began aggressively pursuing actions to diversify the region's supply sources, which now includes desalinated seawater. Information about each water supply is contained in this section and was taken from the Water Authority's 2025 Plan.

The District's local water supply is managed as a surface water source from Lake Henshaw and the San Luis Rey River; however, the District augments the natural runoff into Lake Henshaw with groundwater that is pumped into the lake from the Warner Valley Groundwater Basin. Water quality of District water supplies is also described in Chapter 6.

7. WATER SUPPLY RELIABILITY

Chapter 7 of the 2025 Plan examines the District's water supplies, water uses and the resulting water supply reliability. The UWMP Act requires that an urban water supplier includes, as part of its plan, an assessment of the reliability of its water supply. The assessment must compare the total projected water use with the expected supply over the next 25 years in five-year increments. The reliability assessment is required for normal, single-dry and multiple-dry water years. The 2025 Plan projects reliability for the next 25 years (2025 through 2050).

Also included in Chapter 7 is the District's Drought Risk Assessment (DRA). The UWMP Act requires a DRA, which assesses water supply reliability under a severe drought period lasting for the next five consecutive years from 2026 to 2030. The UWMP Act requires that urban water suppliers now include the consideration of climate change in their water use and supply projections for their long-term water service reliability assessments. The DRA in Section 7.4 considers historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions and anticipated regulatory changes.

8. WATER SHORTAGE CONTINGENCY PLANNING

Water shortage contingency planning is a strategic planning process that the District utilizes to prepare for and respond to water shortages. A water shortage, when water supply available is insufficient to meet the normally expected customer water use, may occur due to a number of reasons, such as water supply quality changes, climate change, drought and/or

catastrophic events. The District's Water Supply Response Program (WSRP), also referred to as a Water Shortage Contingency Plan (WSCP), provides a water supply availability assessment and six structured steps designed to respond to actual conditions. Such planning and preparation will help the District maintain reliable supplies and reduce the impacts of planned and unplanned supply interruptions.

Water Code Section 10632 requires the District to prepare and adopt a standalone WSCP as part of the 2025 Plan. The WSCP is required to plan for a greater than 50% supply shortage. Chapter 8 outlines the District's assessment and planning process. A copy of the District's WSRP, formally adopted by the District Board of Directors on June 17, 2026, is in Appendix D.

9. DEMAND MANAGEMENT MEASURES

Water conservation is an integral part of the District's plan to meet future water demands. Chapter 9 includes information on the District's Demand Management Measures (DMMs) as required by Water Code Section 10631. The District's water conservation program began in 1981 and today relies on a combination of water-use efficiency and programmatic conservation- b a s e d efforts to meet its conservation goals. These efforts include the active enforcement of mandatory water-use efficiency practices, conservation-based water rate structure, residential and commercial device rebates, investments in public education and outreach and an active program to manage distribution system loss.

10. PLAN ADOPTION, SUBMITTAL AND IMPLEMENTATION

Chapter 10 outlines how the District solicited and received public comments on the draft 2025 Plan as well as how the 2025 Plan was formally adopted. In accordance with the UWMP Act, the District held a public hearing to adopt the 2025 Plan. The District notified the public, cities and the county within its service area 60 days prior to the public hearing that its Plan was being updated and made copies of the draft 2025 Plan available for public review prior to the public hearing. The District Board of Directors held a public hearing on June 17, 2026, at 9:00 AM and adopted the 2025 Plan as well as the District's WSRP.

CHAPTER 1 INTRODUCTION AND OVERVIEW

1.1 CALIFORNIA URBAN WATER MANAGEMENT PLANNING ACT

The Water Code requires all urban water suppliers in the state to prepare UWMPs and update them every five years. These Plans satisfy the requirements of the UWMP Act, including amendments that have been made to the UWMP Act. Sections 10610 through 10657 of the Water Code detail the information that must be included in these plans, as well as who must file them. Appendix A contains the text of the UWMP Act; there have been no legislative updates or amendments to the Act since preparation of the District's 2020 Plan.

1.2 SENATE BILL 7 OF THE SEVENTH EXTRAORDINARY SESSION

The California Legislature passed SBX 7-7 on November 10, 2009. The law sought to achieve a 20 percent statewide reduction in urban per capita water use in California by December 31, 2020. The measure required urban retail water suppliers to develop urban water use targets to help meet the 20 percent goal by 2020 and an interim goal of 10 percent by 2015.

The bill included reporting requirements in the 2015 and 2020 Plans. Specifically, urban retail water suppliers must include in their urban water management plans the following information from their target setting process: (1) baseline daily per capita water use; (2) urban water use target; (3) interim urban water use target; and (4) compliance daily per capita water use.

The District addressed the reporting requirements as well as actions taken to achieve the urban per capita water use target pursuant to SBX 7-7 in Chapter 9, Demand Management Measures, in its 2020 Plan. As no end date was included in the Water Code for urban retail water suppliers to report progress on the 2020 target, Table 5-1 in the District's 2025 Plan satisfies the continued reporting requirements of SBX 7-7.

1.3 SENATE BILL 606 AND ASSEMBLY BILL 1668

In 2018, new conservation legislation was signed into law. Senate Bill (SB) 606 and Assembly Bill (AB) 1668 created a framework that directed California Department of Water Resources (DWR) and the State Water Resources Control Board (State Board or SWRCB) to develop and adopt long-term water efficiency targets designed to exceed 20 x 2020 water savings by 2027. Referred collectively as "Making Conservation a California Way of Life," the bills are companion measures that link state water-efficiency targets with local water-supply planning achieve statewide water conservation goals and maintain reliable water supplies.

Each retail urban water supplier across the state will have an Urban Water Use Objectives (UWUO) based on efficiency standards for indoor residential water use, landscape irrigation,

utility water loss, and performance measures for commercial, industrial, and institutional (CII) water use. The Water Code requires annual reporting on actual water usage and grants the SWRCB the authority to monitor, verify and take corrective action to remedy violations if a supplier is non-compliant. These laws expand authorities and requirements for urban water suppliers, while maintaining the foundational provisions of SBX 7-7.

SB 606 and AB 1668 directed DWR and the SWRCB to develop and adopt long-term water use efficiency standards designed to exceed the "20x2020" conservation targets. In July 2024, the SWRCB adopted the "Making Conservation a California Way of Life" regulation which assigned each retail supplier a specific water-use target based on efficiency standards for indoor residential water use, outdoor landscape irrigation, and system water loss. Under this regulation, each urban retail water supplier is required annually to calculate its UWUO no later than January 1, 2025, and demonstrate compliance with the objective by January 1, 2027.

The "Making Conservation a California Way of Life" regulations, in California Code of Regulations (CCR) Title 23, Section 965 et seq, establishes a framework for calculating an UWUO. For the outdoor standards, compliance is based on a landscape efficiency factor (LEF) which indicates the amount of water a supplier needs to deliver to maintain healthy and efficient landscapes. Section 968 sets the residential outdoor water use standard at LEF of 0.80 until June 30, 2035, when it lowers to 0.63, and finally lowers to 0.55 on July 1, 2040. Section 969 sets the CII outdoor water use standard for dedicated irrigation meters (DIMs) at LEF of 0.80 until June 30, 2035, when it lowers to 0.63, and finally lowers to 0.55 on July 1, 2040.

SB 1157 amended Water Code Section 10609.4 to set the residential indoor water use standard at 55 gallons per capita per day (GPCD) until January 1, 2025, when it lowers to 47 GPCD, and finally lowers to 42 GPCD on January 1, 2030.

SB 1572 directed conservation of potable water by prohibiting its use to irrigate non-functional turf (NFT). The bill mandates phased compliance of public landscapes by January 1, 2027, CII landscapes by January 1, 2028, and Homeowners Association (HOA) common areas by January 1, 2029.

1.4 SENATE BILLS 610 AND 221

Water Code Sections 10910 through 10914 and Government Code Sections 65867.5, 66455.3 and 66473.7 (commonly referred to as SB 610 and SB 221) amended state law to improve the link between information on water supply availability and certain land use decisions made by cities and counties. SB 610 requires that the water purveyor of the public water system prepare a water supply assessment to be included in the environmental documentation of certain large, proposed projects. SB 221 requires affirmative written verification from the water purveyor of the public water system that sufficient water supplies are available for certain large residential subdivisions of property prior to approval of a tentative map.

Chapter 6, System Supplies, of the District's 2025 Plan contains documentation on the existing and planned water supplies being developed by the District and its wholesale water suppliers, Water Authority and Metropolitan. Specific documentation verifying Water Authority and Metropolitan supplies can be found in their respective plans.

1.5 WATER SUPPLY MANAGEMENT POLICY

The District's water supply management policy can best be described by its mission statement; "The mission of the District is to manage available resources to meet the present and future water needs of our service area by providing a reliable supply of high-quality water in an environmentally and economically responsible manner…" This means implementing water supply management programs, such as conjunctive use and conservation, to maximize the use of available local resources and minimize the District's need to receive imported water. Below is a discussion of supply management programs used by the District.

Conjunctive Use Program

The District first employed the practice of conjunctive use in 1954 when it drilled 38 wells in the Warner Basin to supplement its local surface water supply, Lake Henshaw. Today, the District has 12 production wells that pump from depths of 150 to 350 feet depending on rainfall and length and extent of pumping operations. The District's operational procedure is to use its surface water supply when available and conserve its groundwater for dry years when run-off is minimal and surface supplies are reduced.

In dry years, groundwater is pumped from the wellfield into Lake Henshaw and released from the lake as needed. In wet years, the surface water supply is used and pumping operations cease, permitting the basin to recharge and groundwater levels to rise. Thus, the groundwater basin can act as a water bank allowing deposits in wet years and withdrawals in dry years.

Recycled Water Program

Wastewater collection, treatment and disposal services within the District's boundaries are provided by the Vista Sanitation District, Buena Sanitation District and Vallecitos Water District. The District was the distributor of recycled water produced by the City of Vista (Buena Sanitation District) at the Shadowridge Water Reclamation Plant (SWRP). The District distributed up to 300 acre-feet (AF) per year of recycled water to the Shadowridge Golf Course when the SWRP was operational. The City of Vista suspended operation of the SWRP in December 2003 due to high production costs. The District currently does not supply recycled water in the District service area and has no plans to do so during the time-period covered in the 2025 Plan.

Groundwater Program

The District does not participate in any groundwater storage (other than natural run-off percolation) or replenishment programs due to the remote location of its surface water supply. However, as described in the above section, the District's management of the Warner Valley Groundwater Basin (Warner Basin) ensures that groundwater is available as a supplemental supply source during dry periods.

In September 2014, the Sustainable Groundwater Management Act (SGMA) was signed into law. The law provides new tools and authorities for local agencies to manage groundwater resources within their jurisdiction to achieve a sustainable use of those resources within a 20-year implementation period. While SGMA provides specific mandates only for those groundwater basins deemed by the State to be "medium" or "high" priority groundwater basins, the law encourages the formation of "Groundwater Sustainability Agencies" (GSAs) and the preparation of "Groundwater Sustainability Plans" (GSPs) for all groundwater basins, even those deemed "low" and "very low" priority basins.

DWR has classified the Warner Basin as a "very low" priority basin; however, the Warner Basin represents a significant water source for the District. Therefore, the District is further investigating groundwater resources in the Warner Basin and evaluating various groundwater management strategies.

Water Conservation Program

The District started its water conservation program in 1981. As drought gripped California in the early 1990's, water purveyors, including the District, increased their water conservation efforts to reduce demand. Over the years, these programs have been successful in managing water demand as populations grew.

The District's population served has increased by 42 percent from 1990 to 2025 (94,526 to 134,588). However, water received for delivery to its customers has remained relatively constant. Water received for delivery has averaged 19,781 acre-feet per year (AF/YR) over this period which is less than water received for delivery in 1990 (22,530 AF/YR).

The District and other Water Authority member agencies partnered with Metropolitan and/or the Water Authority to offer conservation programs to their customers in the early 1990's. Since that time, the Water Authority and its member agencies have jointly funded programs (public education and financial incentives) that benefit the San Diego region. Examples include residential and CII voucher/rebate programs, water surveys, professional and homeowner landscape classes and landscape assistance programs.

CHAPTER 2 PLAN PREPARATION

2.1 BASIS FOR PREPARING A PLAN

The UWMP Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 AF of water annually to prepare and adopt, in accordance with prescribed requirements, an urban water management plan. The UWMP Act requires each urban water supplier to prepare a plan that describes and evaluates reasonable and practical water uses, recycled water and conservation activities. These plans must be filed with DWR at least once every five years, or before July 1, in years ending in one and six.

As defined in the UWMP Act, the District is an urban water supplier as it provides water for municipal purposes to more than 3,000 customers and supplies more than 3,000 AF annually. As shown in table 2-1, in 2025, the District served 29,156 municipal connections and supplied 16,319 acre-feet (AF) of water to its customers.

Submittal Table 2-1 Retail: Public Water Systems

Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
Add additional rows as needed			
3710027	Vista Irrigation District	29,156	16,977
	Total	29,156	16,977

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

2.2 PLANNING AND COMPLIANCE

The District's 2025 Plan reports solely on its service area. However, the District does rely on plans submitted by its wholesalers, the Water Authority and Metropolitan, to provide details on imported supplies necessary to meet future demands within its service area. Coordination with said agencies is discussed below and reflected in information contained in the 2025 Plan.

2.3 FISCAL YEAR AND UNITS OF MEASURE

The District is reporting as retailer, on a FY basis and using AF as its unit of measure.

2.4 COORDINATION AND OUTREACH

2.4.1 Wholesale and Retail Coordination

To demonstrate the District's water supply reliability over the next 25 years, the 2025 Plan quantifies existing and projected local and imported supplies necessary to meet future retail demands within the District's service area. While the 2025 Plan includes specific information on District's supplies, the Plans submitted by its wholesalers, the Water Authority and Metropolitan, will provide details on their respective supplies that contribute to the reliability of supplies for the District.

Reasonable consistency among the plans of water wholesalers, Metropolitan and the Water Authority, and their member agencies' plans are important to identify the projected supplies available to meet regional demands. Over the past year, District staff have actively participated in member agency work group meetings coordinated by the Water Authority. District staff, along with the other member agencies' personnel, have reviewed and provided input in data that was used to update the Water Authority's 2025 Plan. The District has also been given the opportunity to provide input on the Water Authority's draft 2025 Plan during various stages of its development. The coordination efforts ensured that the Water Authority's and member agencies' plans were developed using the most up to date information available, making the documents a solid basis for regional and local water management planning.

2.4.2 Coordination with Other Agencies and the Community

The District coordinated the preparation of its 2025 Plan with appropriate local agencies, including other water suppliers and relevant public agencies, to the extent practicable. In accordance with the UWMP Act, the District notified cities and the county within its service area 60 days prior to the public hearing that it was preparing a 2025 Plan. The draft 2025 Plan was made available for public review on the District's website and in hardcopy at its office. Copies of the draft 2025 Plan were made available to agencies listed in Table 2-1 as well as the Vista Chamber of Commerce and South Vista Communities (a non-profit community organization). Please

refer to Table 2-2 for additional information on the District's coordination process.

TABLE 2-2: COORDINATION WITH OTHER AGENCIES

Agencies	Participated in UWMP Development	Commented on the Draft	Attended Public Meetings	Contacted for Assistance	Received Copy of the Draft	Sent Notice of Intention to Adopt	Not Involved/ No Information
Metropolitan					✓	✓	
Water Authority	✓			✓	✓	✓	
City of Vista	✓			✓	✓	✓	
City of Escondido					✓	✓	
City of Oceanside					✓	✓	
City of San Marcos					✓	✓	
County of San Diego					✓	✓	
Encina Wastewater Authority					✓	✓	
State Water Resources Control Board, District 14					✓	✓	
Vista Unified School District					✓	✓	

2.5 DWR CHECKLIST, STANDARIZED TABLES AND SBX 7-7 VERIFICATION FORM

DWR prepared a checklist of items based on the UWMP Act that must be addressed in an agency's Plan. This checklist allows an agency to identify where in its plan it has addressed each item. The District has completed the checklist, referencing the sections and page numbers included in the 2025 Plan; the completed checklist along with required standardized tables and SBX 7-7 verification form are included in Appendix E.

This Page Intentionally Left Blank

CHAPTER 3 SYSTEM DESCRIPTION

3.1 FORMATION AND PURPOSE

The District was formed in 1923 pursuant to Section 20500, et. seq., of the Water Code. The District, through the Bueno Colorado Municipal Water District, joined the Water Authority and Metropolitan in 1954 to acquire the right to purchase and distribute imported water throughout its service area. On November 23, 1993, the Bueno Colorado Municipal Water District was dissolved and reorganized into the District; at that time, the District became a member agency of the Water Authority.

3.2 SERVICE AREA

The District covers an area of approximately 21,100 acres as shown in Figure 3-1. The service area includes the City of Vista and portions of the cities of Escondido, Oceanside, and San Marcos, and unincorporated areas of San Diego County. The District is responsible for the operation and maintenance of all its water supply and distribution facilities.

All water delivered by the District is treated and includes water purchased from the Water Authority and local water from Lake Henshaw. The District has storage and water treatment facilities. Groundwater from the Warner Basin is used to supplement the local surface water supply (Lake Henshaw) whenever surface runoff is insufficient to produce adequate supplies of local water. Wastewater collection, transmission, treatment and disposal services to developed areas within District boundaries are provided by other agencies not associated with the District.

3.2.1 Relationship to Other Water Agencies

<u>San Diego County Water Authority</u>

The Water Authority was organized on June 9, 1944, under the County Water Authority Act for the express purpose of importing Colorado River water into San Diego County.

Imported water, a combination of Colorado River Water, SWP, and local desalinated seawater produced at the Claude “Bud” Lewis Carlsbad Desalination Plant, are sold to the 22 member agencies of the Water Authority. The member agencies are autonomous, and their city councils or boards of directors set local policies and water pricing structures. Each member agency may appoint at least one representative (based on assessed valuation) to the Water Authority Board of Directors.

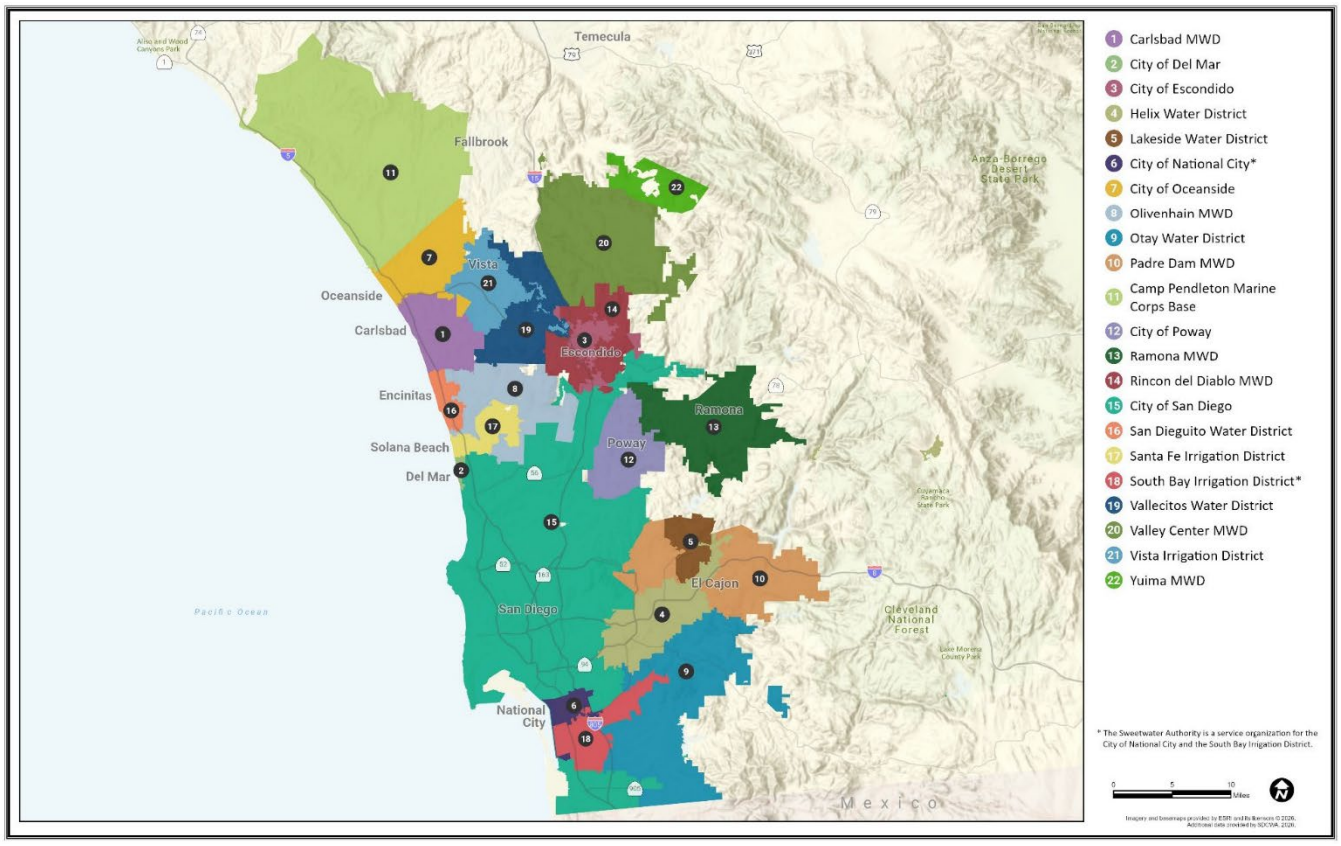
The District is one of 22 member agencies of the Water Authority. Member agency status entitles the District to directly purchase water for its needs from the Water Authority to ensure, to the best of its ability, that adequate amounts of water will be available to satisfy future water requirements. A map of the Water Authority, which also shows the position of the District within the Water Authority's boundaries, is included as Figure 3-2. Over half of the water distributed by the Water Authority is purchased from Metropolitan and/or conveyed through its infrastructure into Water Authority pipelines just south of the San Diego County/Riverside County boundary. The Water Authority annexed to Metropolitan in 1946 and is now represented on the Metropolitan Board by four directors. The Water Authority is the largest of the 26 member agencies of Metropolitan and currently purchases approximately six percent of the total Metropolitan water supply.

Metropolitan Water District of Southern California

Metropolitan was created by a vote of the people in 1928 following the passage of the Metropolitan Water District Act by the California Legislature to provide supplemental water for cities and communities on the south coastal plain of California. Since its formation, Metropolitan has grown to include 26 member agencies (including the Water Authority), as shown on Figure 3-3, and currently covers an area which includes all or portions of Ventura, Los Angeles, Orange, Riverside, San Bernardino and San Diego counties. Acting as a water wholesaler, Metropolitan supplies water to an estimated 19 million people within its service area.

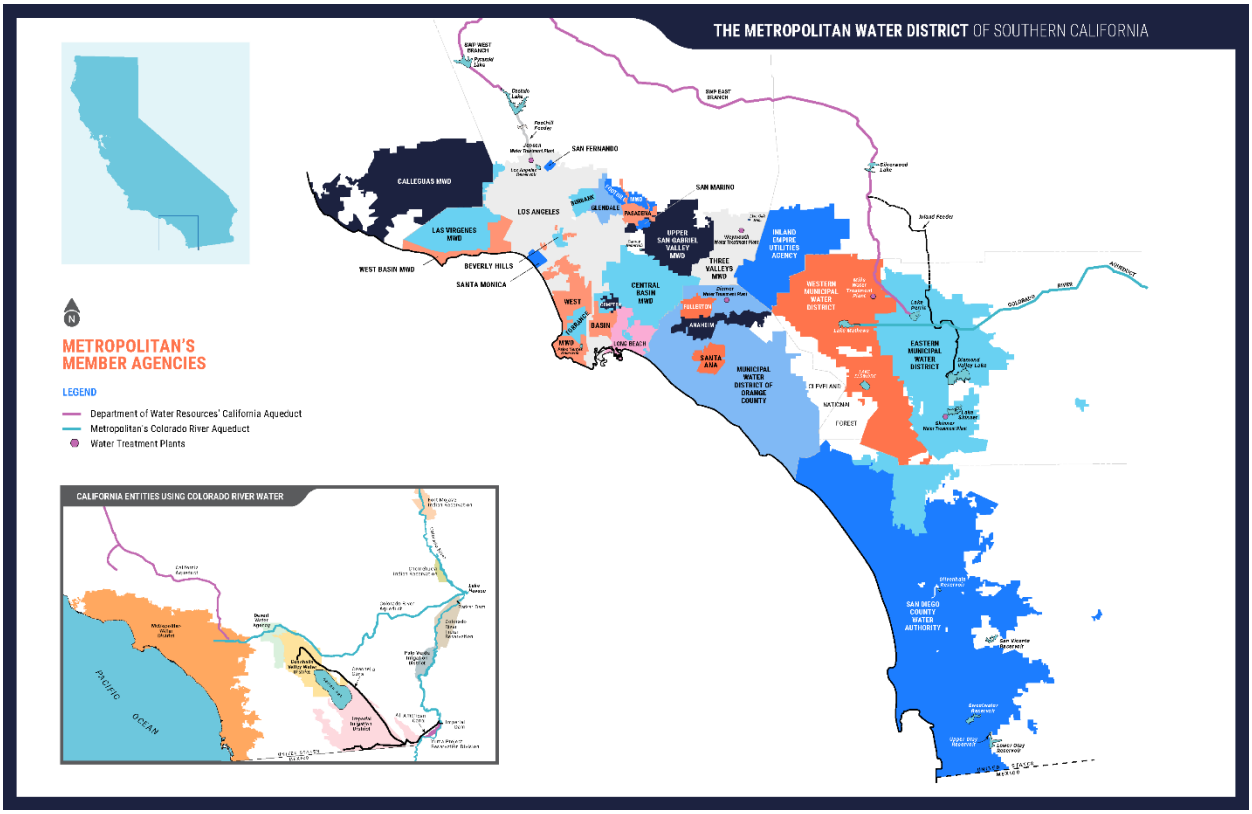
FIGURE 3-1: VISTA IRRIGATION DISTRICT SERICE AREA MAP

FIGURE 3-2: SAN DIEGO COUNTY WATER AUTHORITY SERVICE AREA MAP



Full size map can be found in Appendix C

FIGURE 3-3: METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA SERVICE AREA MAP



Full size map can be found in Appendix C

3.2.2 Service Area Climate

Climatic conditions within the service area are characteristically Mediterranean with mild temperatures year-round. More than 80% of the region's rainfall occurs in the period between November through March. During FYs 2021 through 2025, the average annual rainfall in Vista was approximately 10 inches per year. At Lake Henshaw, which is 25 miles inland from the District's service area and the local source of 15% to 20% of the District's water supply, the average annual rainfall was about 23 inches per year. Table 3-2 contains detailed information regarding the climate for the District's service area and local water supply.

TABLE 3-1: CLIMATE JUNE 2020-JUNE 2025

	Jan	Feb	Mar	Apr	May	Jun
Average Monthly ETo	2.44	2.85	4.08	5.07	5.87	6.67
Average Rainfall (Inches) Vista	2.39	1.14	3.19	0.29	0.13	0.02
Average Rainfall (Inches) Lake Henshaw	4.7	4.5	6.5	0.6	0.3	0.1
Average Daily Maximum Temperature (Fahrenheit) Vista	66.4	66.8	65.5	68.4	69.7	74.7
Average Daily Minimum Temperature (Fahrenheit) Vista	43.2	43.9	46.0	49.7	54.3	58.5
Average Daily Maximum Temperature (Fahrenheit) Lake Henshaw	60.1	61.2	61.4	70.5	75.6	86.6
Average Daily Minimum Temperature (Fahrenheit) Lake Henshaw	45.2	46.1	48.0	54.1	59.4	67.7

TABLE 3-1: CLIMATE (Continued)							
	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Monthly ET_0	6.92	6.71	5.22	4.02	2.78	2.17	48.35
Average Rainfall (Inches) Vista	0.03	0.33	0.12	0.32	0.50	1.39	9.85
Average Rainfall (Inches) Lake Henshaw	0.1	0.6	0.2	0.5	1.8	3.5	23.25
Average Maximum Temperature (Fahrenheit) Vista	79.9	82.3	81.4	77.7	72.6	67.0	72.7
Average Minimum Temperature (Fahrenheit) Vista	62.4	63.9	62.1	55.5	47.0	44.3	52.6
Average Maximum Temperature (Fahrenheit) Lake Henshaw	94.6	94.4	89.3	80.7	69.8	63.3	75.63
Average Minimum Temperature (Fahrenheit) Lake Henshaw	75.0	75.1	70.2	61.2	51.2	46.8	58.32

Sources: *California Irrigation Management Information System (CIMIS), Station 150 Vista Irrigation District*

3.2.3 Service Area Population

According to the SANDAG Series 15 Growth Forecast, ver. 17, the region's population will slightly decrease. Based on projections presented in SANDAG's Series 15 Growth Forecast, ver. 17, the population in the District's service area is expected to decrease from 134,501 in 2025 to 128,037 by 2050, a five percent decrease. Table 3-1 shows the population projections for the District from 2025 to 2050.

TABLE 3-2: POPULATION – CURRENT AND PROJECTED						
	2025	2030	2035	2040	2045	2050
Service Area Population	134,501	130,551	131,369	130,895	129,466	128,037

3.2.4 Social, Economic, and Demographic Factors

Water Code Section 10631 requires water suppliers to describe the District service area and include other social, economic and demographic factors affecting the District's water supply management planning. The District generally uses various economic and demographic forecasts from SANDAG for planning and reporting purposes.

TABLE 3-3: DISTRICT DEMOGRAPHICS

	2030	2035	2040	2045	2050
Population	**130,551**	**131,369**	**130,895**	**129,466**	**128,037**
Single Family	69,434	70,508	72,104	73,126	73,284
Multi-Family	59,295	63,094	66,255	70,476	71,545
Mobile Home	9,588	9,434	9,369	9,246	9,297
Group Quarters	2,487	2,487	2,487	2,487	2,487
SF Housing Units	26,142	26,281	26,218	26,210	26,202
MF Housing Units	16,634	17,461	18,257	18,460	18,662
Mobile Home Units	3,140	3,140	3,140	3,140	3,140
Total Non-Ag Employment Counts	**46,551**	**47,587**	**48,993**	**50,247**	**51,184**
Construction	5,053	5,118	5,209	5,282	5,351
Manufacturing	9,072	9,138	9,229	9,304	9,385
Wholesale Trade	3,396	3,420	3,446	3,465	3,483
Retail Trade	5,045	5,007	5,154	5,274	5,382
Transportation, Warehousing, Utilities	612	614	618	623	627
Information	289	304	310	320	328
Finance and Real Estate	1,056	1,118	1,177	1,213	1,257
Professional and Business Services	4,145	4,369	4,628	4,882	4,998
Education and Health Services	4,924	5,047	5,201	5,358	5,477
Leisure and Hospitality	3,312	3,479	3,661	3,834	3,973
Other Services	1,135	1,169	1,212	1,241	1,259
Government	5,337	5,499	5,704	5,896	6,031
Self Employed and Domestic	3,175	3,305	3,444	3,555	3,633
Agricultural Employment Counts	2,025	2,031	2,039	2,049	2,049
Median Household Income	$ 58,785	$ 59,836	$ 61,294	$ 62,130	$ 63,366

SANDAG, Series 14 Growth Forecast (version 17)

3.3 LAND USE WITHIN SERVICE AREA

Water Code Section 10631(a) requires water suppliers to include current and projected land uses within the existing service area affecting the District's water management planning. Local and regional agencies have adopted planning documents that designate the allowable types of land uses within their jurisdiction. The District's boundary encompasses property within the cities of Vista, San Marcos, Oceanside and Escondido and the County of San Diego. Each of these agencies has adopted a General Plan document that is subsequently incorporated into a regional planning database that is periodically updated. The following documents and land use data were used for the District's Potable Water Master Plan:

- SANDAG Series 13: 2050 Regional Growth Forecast
- City of Vista Downtown Specific Plan, dated September 2015

For more detailed information on projected water use by sector and the land use and planning documents that guided such analysis, see Section 4.3.

This Page Intentionally Left Blank

CHAPTER 4 – SYSTEM WATER USE

Water use in the District's service area falls into two classes, municipal and industrial (residential and non-residential) and agriculture. Currently, M&I uses constitute approximately 96 percent of the District's water consumption. The remaining four percent is attributable to agricultural water use, primarily for irrigation of groves and nursery products. This Chapter describes the District's current and projected water use.

4.1 NON-POTABLE VERSUS POTABLE WATER USE

Potable water uses are served by an urban water supplier's potable water sources that comply with Title 23 Drinking Water Standards. Non-potable water uses are served by the urban water supplier's non-potable water sources such as recycled water, remediated groundwater, or even untreated surface of groundwater water supplies.

For purposes of the 2025 Plan, the District is considered a potable water supplier. While the District does have its own local groundwater pumping and surface water supplies, these source waters are purified to a potable level through Title 23 treatment prior to reaching any customers. Therefore, this Chapter only addresses potable water, and any references to "water" are assumed to be potable.

4.2 PAST AND CURRENT WATER USE BY SECTOR

Past and current water use for the District was evaluated by examining the monthly metered water deliveries during each fiscal year. Every metered account is coded according to the water use type that it serves. The total demands are then totaled for each use type. Previous years' water deliveries can be found in the annual water audits reported to the DWR using the American Water Works Association Free Water Audit Software..

The District provided an average of 14.6 million gallons per day of potable water to residential, commercial, industrial, institutional, landscape irrigation and agricultural uses in FY 2025. It should be noted that this average demand figure does not include water consumption for fire lines, construction meters, or other end delivery facilities that are typically unbilled uses such as fire hydrant testing or system flushing.

The District serves a predominantly residential community, where over two-thirds of the water use is from single-family, mobile home and multi-family residential. Table 4-1 shows current (FY 2025) demands within the District's service area by water use type (in units of AF). Each of these use types is further explained in the following subsections.

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual
Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family		Potable	8,035
Multi-Family		Potable	3,025
Commercial		Potable	1,231
Industrial		Potable	573
Institutional/Governmental		Potable	505
Landscape		Potable	1,922
Groundwater recharge			-
Saline water intrusion barrier			-
Agricultural		Potable	640.57
Sales/Transfers/Exchanges to other Suppliers			-
Distribution System Water Loss	Real and Apparent Losses	Potable	618.67
Other (optional)	Mobile Homes	Potable	385.62
Other (optional)	Billed Unmetered	Potable	1.53
Other (optional)	Unbilled Metered	Potable	4.97
Other (optional)	Unbilled Unmetered	Potable	40.79
Other (optional)	Water Audit Storage Adjustment Factor	Potable	-6
		Subtotal Potable	16,977
		Subtotal Non-Potable	0
		Total	16,977

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

1 VID does not currently replenish groundwater supplies or inject water into freshwater aquifers to prevent intrusion of saltwater.
2 Agricultural irrigation includes single accounts that provide water for agricultural as well as domestic use. All accounts and deliveries for agricultural-domestic use are assigned to this use type.
3 VID does not wholesale water to other agencies. All exchanges of potable water with other agencies are tracked by the District's wholesale agency, the San Diego County Water Authority, and demands are allocated to each agency accordingly.

4.2.1 Single Family Residential

The single-family residential use type includes lots with freestanding buildings containing one dwelling unit. A detached secondary dwelling unit may also occupy the lot. Single-family homes account for 49.2 percent of total annual water deliveries. They tend to have more people living in the household and more landscaping per home; also, they are more likely to have water-saving fixtures and appliances in the home.

4.2.2 Multi-Family Residential

The multi-family residential use type includes several units contained within one building or several buildings within one complex. Multi-family homes account for 18.5 percent of total annual water deliveries. within the District. Muti-family properties tend to house fewer people (within a single multiple-family home or unit) than single-family units and have less landscaping per capita.

4.2.3 Commercial

The commercial sector has a complex mix of customers ranging from markets, restaurants and antique stores to multi-story office buildings and regional shopping centers. This land use type accounts for 7.5 percent of total annual water delivered to the District's distribution system.

4.2.4 Industrial

The industrial sector typically involves the manufacturing and processing of materials but can also include water users engaged in research and development. In the District's service area, this land use type is primarily centered on light manufacturing and accounts for 3.5 percent of total annual water deliveries.

4.2.5 Institutional and Governmental

The District has a stable institutional and governmental sector consisting of local government, schools and a public hospital. It also includes a courthouse, churches and nonprofit research institutions. This land use type accounts for three percent of total annual water delivered to the District's distribution system.

4.2.6 Landscape

The District tracks landscape usage through meters dedicated strictly to irrigation for multi-family, commercial, industrial, institutional and governmental properties. These meters do not serve domestic water demands or water for agricultural uses; said demands are served and tracked through separate dedicated meters. This land use type accounts for over 11.8 percent of total annual water delivered to the District's distribution system.

4.2.7 Groundwater Recharge and Saline Water Intrusion Barriers

Groundwater recharge includes the managed and intentional replenishment of natural groundwater supplies using man-made conveyances such as infiltration basins or injection wells. Saline water intrusion barriers include the injection of water into a freshwater aquifer to prevent the intrusion of saltwater. As stated in the Notes section Table 4-1, the District does not currently replenish groundwater supplies or inject water into freshwater aquifers to prevent intrusion of saltwater, and therefore no demand is assigned to these use types.

4.2.8 Agricultural Use

Climatic conditions within the District's service area, which are traditionally Mediterranean with mild temperatures year-round, provide an ideal climate to grow a number of crops. The primary crops grown are avocados, citrus and nursery products. Some livestock and local fresh market crops are produced within the District's service area. Agriculture uses currently account for 3.9 percent of total annual water deliveries; this percentage also includes combined agricultural and domestic meter accounts. As shown in Table 4-2, agricultural water demand is projected to gradually increase over the next 25 years.

4.2.9 Sales, Transfers and Exchanges to Other Agencies

The District does not sell water to other agencies; it maintains distribution inter-ties with its neighboring water agencies. During local water supply interruptions, whether planned due to maintenance or unplanned due to an emergency, the agencies cooperatively transfer water between them for distribution to affected customers. As noted in Table 4-1, all exchanges of potable water with other agencies are tracked by the District's wholesale agency, the Water Authority, and demands are allocated to each agency accordingly.

4.2.10 Distribution System Losses

Distribution system losses include real and apparent losses that are reported to DWR annually using the American Water Works Association Free Water Audit Software. Real losses can include pipeline breaks and leaks, losses due to vandalism, and losses due to accidents (i.e. car crashes involving fire hydrants) where the District is not able to recoup damages. Apparent losses can include unauthorized usages (i.e. water theft), customer metering inaccuracies and systematic data handling errors. In 2025, system and billing losses account for approximately 3.6 percent of the total annual water delivered to its distribution system.

4.2.11 Mobile Homes

The mobile-home land use type includes those developments that contain manufactured living units. They comprise approximately seven percent of the housing stock within the District service area. They tend to have minimal landscaping and thus account for 2.4 percent of total annual water deliveries.

4.2.12 Billed Unmetered, Unbilled Metered and Unbilled Unmetered

Billed unmetered uses can include reimbursement from damage claims (i.e. car crashes involving fire hydrants). Unbilled metered usage can include the District's own water usage at its headquarters or facilities, and fire department usage for training or hydrant flushing. Unbilled unmetered uses can also include District reservoir washout activities where water volume use is estimated. Overall, these types of authorized consumption account for a very small fraction (approximately 0.3 percent) of the total annual water delivered to the District's distribution system.

4.3 PROJECTED WATER USE BY SECTOR

Table 4-2 shows projected demands per use type for the District's service area through 2050. The projected water use is consistent with the Water Authority's demand forecast for the District. The District's 2025 Plan considered several factors to project water demands. The main factor is historical demand and water loss experience. Historical demand has been stable over the last five and 10 year averages. Prior to that time, customers adjusted their usage in response to multiple droughts, higher water costs and economic factors. Many moved towards water-wise landscaping; low water use appliances and other techniques to permanently lower water usage.

The decrease in demand during that time has stabilized water consumption and is expected to remain stable unless new regulations, severe prolonged drought or high costs cause customers to again find ways to permanently lower water use. The District also considered SANDAG Series 15 population and housing projections which expect the overall population to decrease slightly but multi-family housing and overall housing to increase. Multi-family housing does not generate as much water use as single family due to less irrigation being required. Regarding apparent and real loss water estimates, the District expects to meet the proposed water loss performance standard established for the District by the State Board. In addition, the water loss has remained relatively stable. Considering all these factors and the 10-year stability of water demand, the District only made slight changes to future projections.

Table 4-2: Use for Potable Water - Projected						
Use Type	Additional Description	Projected Water Use				
		2030	2035	2040	2045	2050
Single Family		7,544	7,652	7,769	7,813	7,857
Multi-Family		2,840	2,880	2,924	2,941	2,958
Commercial		1,156	1,172	1,190	1,197	1,204
Industrial		538	546	554	557	561
Institutional/ Governmental		474	481	488	491	494
Landscape		1,805	1,830	1,858	1,869	1,880
Groundwater recharge[1]		N/A	N/A	N/A	N/A	N/A
Saline water intrusion barrier[1]		N/A	N/A	N/A	N/A	N/A
Agricultural irrigation		601	610	619	623	626
Sales/Transfers/ Exchanges[2]		N/A	N/A	N/A	N/A	N/A
Losses	Real and Apparent Losses	876	876	876	876	876
Other Potable	Mobile Homes	362	367	373	375	377
Other Non-Potable		N/A	N/A	N/A	N/A	N/A
Other	Billed Unmetered	10	10	10	10	10
Other	Unbilled Metered	4	4	4	4	4
Other	Unbilled Unmetered	40	40	40	40	40
	TOTAL	16,250	16,469	16,706	16,796	16,886

NOTES:
[1]The District does not currently replenish groundwater supplies or inject water into freshwater aquifers to prevent intrusion of saltwater.

[2]The District does not wholesale water to other agencies. All exchanges of potable water with other agencies are tracked by the District's wholesale agency, the Water Authority, and demands are allocated to each agency accordingly.

As discussed in Section 4.1, the District is considered a potable water supplier only. The District does not own and maintain a recycled water distribution system and does not have recycled water demand. Therefore, gross water use is completely potable.

4.4 DISTRIBUTION SYSTEMS WATER LOSSES

Section 10631(d)(3) of the Water Code requires that urban water suppliers report their distribution system loss for each of the five years preceding their UWMP update. Table 4-3 shows the District submitted water loss reports over the previous five years. The reports can be viewed at https://wuedata.water.ca.gov/awwa_plans.

As discussed in Section 4.2.10, real losses can include pipeline breaks and leaks, losses due to vandalism, and losses due to accidents (i.e. car crashes involving fire hydrants) where the District is not able to recoup damages. Apparent losses can include unauthorized usages (i.e. water theft), customer metering inaccuracies and systematic data handling errors.

Table 4-3: Water Loss

Real Loss				
State Water Board Standard		Most Recent AWWA Water Loss Audit		Real Water Loss Per Unit per Day
2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss	Number of Connections	Volume of Total Real Loss	
24.9	Gallons per Service Connection per Day	28,811	377.582	11.7

Apparent Loss				
State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
2028 Apparent Water Loss Standard per Unit per day	Units for Apparent Water Loss	Number of Connections	Volume of Total Real Loss	
11.7	Gallons per Service Connection per Day	28811	241.082	7.5

4.5 WATER USE FOR LOWER INCOME HOUSEHOLDS

As required by the UWMP Act, the District includes lower income residential demands in the future demand projections given in Table 4-2.

4.6 ESTIMATED FUTURE WATER SAVINGS

As stated in section 4.3, the District did not incorporate estimated future water savings into projecting future demands. Rather the District utilized historical water demand trends and population forecasts that both remain flat to project future water demands.

Table 4-4: Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections?	No
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc.… utilized in demand projections are found.	
Are Lower Income Residential Demands Included In Projections?	Yes

4.7 CLIMATE CHANGE CONSIDERATIONS

The UWMP Act requires that urban water suppliers consider climate change in their water use and supply projections for their long-term water service reliability assessments. The DRA in Section 7.4 considers historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions and anticipated regulatory changes.

Water demand can be highly variable with climate. Drought and higher temperatures can lead to increases in water use, while wet periods and colder temperatures can lead to decreased water use. For example, the average five-year water usage ending in FY 2025 was 15,696 AF. Water demands in a wet year, such as FY 2024, were 10 percent less than the average, and water demands in a dry year, such as FY 2021, were 10 percent more than average.

Section 7.3 details single and multiple dry year assessments on the District's projected water demands due to climate variation. In summary, the District projects that hot and dry weather (absent mandatory water use restrictions) may generate 10 percent greater demands than during normal years, as demonstrated by the impacts on demands during FY 2021 discussed above.

The District also anticipates that regulatory changes will have an impact on water demands. The State Board is in the process of establishing water-use efficiency regulations that will establish water use targets for urban water suppliers. In developing its regulations, the State Board has drafted real water loss performance standards for all suppliers. As of January 1, 2026, the District's proposed standard is 24.9 gallons per connection per day. The District expects to meet the proposed water loss performance standard established by the State Board. As such, the projected real and apparent water loss projections shown in Table 4-2 assume compliance with this standard

This Page Intentionally Left Blank

CHAPTER 5 BASELINE AND TARGETS

5.1 BASELINE DAILY PER CAPITA WATER USE

SBX 7-7 was enacted in 2009 to require retail urban water agencies within the state to achieve a 20 percent reduction in urban per capita water use by December 31, 2020 (referred to as "20 X 2020") and interim savings of 10 percent by 2015. The District is a retail supplier pursuant to the definition provided in Water Code Section 10608.12, as it provides potable municipal water to more than 3,000 end users and supplies more than 3,000 AF of potable water annually at retail for municipal purposes. Water Code Section 10608.40 requires retail suppliers to report on their progress in meeting their urban water use targets, and the Water Code does not set an end date for reporting on this progress. The District's baseline and target daily per capita water use figures were developed individually, and in accordance with Methodologies for Calculating Baseline and Compliance Per Capita Water Use developed by DWR

5.1.1 Ten-Year Baseline Period

Since the District did not deliver any recycled water in 2008, its baseline per capita water use is based on gross average water use over a continuous 10-year period beginning June 1, 1995, and ending June 30, 2005. Water Authority invoices and Escondido-Vista Water Treatment Plant (WTP) monthly reports for FYs 1996 through 2005 were used to derive total water deliveries. The population estimates for FYs 1996 through 2005 are based on data from SANDAG. As shown in Table 5-1, the District met its 2020 target in 2020.

TABLE 5-1: SB X7-7 2020 TARGET PROGRESS

Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target?	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?
No	Individual Target	142	109	Yes

This Page Intentionally Left Blank

CHAPTER 6 – SYSTEM SUPPLIES

The District currently has several water sources including both purchased and local water supplies. Purchased water supplies are conveyed to the District by Metropolitan and/or the Water Authority and may be derived from sources developed by either of those two agencies or through the auspices of the United States Department of the Interior, Bureau of Reclamation (Reclamation). Local water supply is managed as a surface water source from Lake Henshaw and the San Luis Rey River; the District augments the natural runoff into Lake Henshaw with groundwater that is pumped into the lake from the Warner Basin. Future increases in District water demands will be supplied by the Water Authority. Over half of the Water Authority's water supply is either purchased from and/or conveyed by Metropolitan. Due to the District's reliance on these two agencies, the 2025 Plan includes information on the current and planned water supplies of Metropolitan and Water Authority.

The District is a public agency member of the Water Authority. The Water Authority is a public agency member of Metropolitan. The statutory relationships between the Water Authority and its member agencies, and Metropolitan and its member agencies, respectively, establish the scope of the District's entitlements to water from those sources. The water furnished to the District by Reclamation is provided under the authority of the San Luis Rey Indian Water Rights Settlement Act (Settlement Act, Public Law 100-675, as amended) and the various agreements pertaining to the disposition and conveyance of that water.

6.1 WATER SUPPLY ANALYSIS OVERVIEW

Historically, the Water Authority has relied on imported water supplies purchased from Metropolitan to meet the needs of its 22 member agencies. Metropolitan's supplies come from two primary sources, the SWP and the Colorado River. After experiencing severe shortages from Metropolitan during the 1987 to 1992 drought, the Water Authority began aggressively pursuing actions to diversify the region's water supply portfolio. Information about each water supply is contained in this section and was taken from the Water Authority's 2025 Plan. Detailed documentation verifying the Water Authority and Metropolitan's water supplies can be found in each agency's 2025 Plan.

6.1.1 Imported Water Supplies from Metropolitan

<u>Colorado River</u>

Metropolitan was formed to import water from the Colorado River. During the 1930s, Metropolitan built the Colorado River Aqueduct (CRA) to convey this water. Metropolitan's member agencies received the first deliveries in 1941. The aqueduct is more than 240 miles long, beginning at Lake Havasu on the Arizona/California border and ending at Lake Mathews in Riverside County. The aqueduct has capacity to deliver up to 1.3 million acre-feet per year

(MAF/YR). Before 1964, Metropolitan had a firm annual allocation of 1.212 million acre-feet (MAF) of Colorado River water through contracts with the U.S. Department of the Interior, which was enough to keep Metropolitan's aqueduct full. However, because of the U.S. Supreme Court decision in Arizona vs. California, Metropolitan's firm supply fell to 550,000 AF. Due to growth in demand from other states and drought conditions, since 2003, Metropolitan's deliveries have been limited to the base apportionment plus water resulting from unused apportionment water by other Colorado River water users, transfer programs resulting from conservation with senior water right holders, storage volumes from Lake Mead, and interstate water banking. The execution of the 2003 Quantification Settlement Agreement (QSA) set up mechanisms for California Colorado water users to manage demands within its apportionment and to conserve and transfer water between willing buyers and sellers.

Water availability from the Colorado River is governed by a system of priorities and water rights that have been established over many years. The Colorado River Lower Basin states (California, Arizona, and Nevada) have an annual apportionment of 7.5 MAF of water divided as follows: (1) California, 4.4 MAF; (2) Arizona, 2.8 MAF; and (3) Nevada, 300,000 AF. The 1931 Seven Party Agreement established California's priorities for water with the first three priorities, totaling 3.85 MAF, going to agricultural agencies and the fourth priority (550,000 AF) going to Metropolitan. Additional water must come from surplus water from unused allocations within California or from other Lower Basin states.

In 2019, Drought Contingency Plans (DCP) were executed for the Upper and Lower Colorado River Basins to reduce the risk of Lake Powell and Lake Mead declining below critical elevations through 2026. The Lower Basin Drought Contingency Plan (Lower Basin DCP; Reclamation, 2019) requires California, Arizona, and Nevada to store defined volumes of water in Lake Mead at specified lake levels. California would begin making contributions if Lake Mead's elevation drops below 1,045 feet. Depending on the lake's elevation, California's Lower Basin DCP contributions range from 200,000 to 350,000 AFY, with Metropolitan responsible for 93 percent. California was not required to make any DCP contributions as Lake Mead levels remained above the relevant threshold for California. Through the DCP, Metropolitan has the ability to deliver water stored as Intentionally Created Surplus (ICS) at Lake Mead elevations below 1,075 feet. As of June 2025, Metropolitan had approximately 1.3 MAF of ICS water stored in Lake Mead. The Lower Basin DCP expires in 2026. Currently, new operating agreements are being negotiated in the coming years that will govern shortage criteria and cutbacks beyond 2026.

Metropolitan currently has a firm supply from of 550,000 AF. Faced with continuing dry hydrologic challenges and increasing demands, Metropolitan has relied on its land fallowing, storage and exchange programs on the river to increase its Colorado River supplies. With the 2003 QSA and related agreements among the Imperial Irrigation District (IID), the Coachella Valley Water District (CVWD), State of California, Department of Interior, Metropolitan and the Water Authority in place, a plan was formalized on how California will implement water transfers and supply programs that allow California to live within the state's 4.4 MAF basic

annual apportionment of Colorado River water. Since then, Metropolitan has relied on cooperative transfer programs and storage programs to increase its Colorado River water deliveries beyond its firm supply.

State Water Project

Metropolitan's other water source, the SWP, is owned by the State of California and operated by DWR. The project stretches more than 600 miles, from Lake Oroville in the north to Lake Perris in the south. Water is stored at Lake Oroville and released when needed into the Feather River, which flows into the Sacramento River and to the Sacramento-San Joaquin River Delta. In the north Delta, water is pumped into the North Bay Aqueduct for delivery to Napa and Solano counties. In the south Delta, water is diverted into the SWP's Banks Pumping Plant, where it is lifted into the 444-mile-long California Aqueduct. Some of this water flows into the South Bay Aqueduct to serve areas in Alameda and Santa Clara counties. The remainder flows southward to cities and farms in central and southern California. In the winter, when demands are lower, water is stored at the San Luis Reservoir located south of the Delta.

The reliability of SWP supplies is limited by both the level of SWP supply development and pumping restrictions due to state and federal environmental regulations and hydrology. When approved by the voters in the 1960s, the SWP was planned to deliver 4.2 MAF to 32 contracting agencies. Subsequent contract amendments reduced total contracted deliveries to 4.13 MAF and the number of contracting agencies to 29. Metropolitan's contracted entitlement is 1,911,500 AF. Metropolitan's original long-term water supply contract for 2,011,500 AF was amended as part of the 2003 QSA. Effective in 2005, the amendment resulted in an exchange agreement among CVWD, Desert Water Agency (DWA), and Metropolitan. The exchange agreement provides for the transfer of 88,100 AF of Metropolitan's Table A amounts to CVWD and 11,900 AF of Metropolitan's Table A amounts to DWA.

When voters approved construction of the SWP in 1960, state planners did not expect the full amount of contracted water to be needed for at least the first 20 years of the project. As a result, the planners anticipated that the facilities needed to produce the full contracted amount would be constructed over time as demands on the system increased. However, decisions about these additional facilities were repeatedly deferred as public attitudes and environmental regulations changed and costs increased. New state and federal environmental laws put some potential water supply sources off limits to development. More stringent water quality standards adopted by the State Board to protect the San Francisco Bay/Sacramento–San Joaquin River Delta have reduced the amount of water available for diversion. Environmental challenges to the SWP operations also resulted in the issuance of new biological opinions, which led to pumping restrictions that further reduced SWP exports. At the same time, California's population and water demand continued to grow.

Metropolitan's SWP supplies are projected using DWR's Draft 2025 State Water Project Delivery Capability Report. This report presents current DWR estimates of the amount of water deliveries under current 2025 conditions and under projected conditions over the next 20 years. In the 2025 State Water Project Delivery Capability Report, delivery estimates for the SWP under 2025 conditions, with existing conveyance and low outflow, as a percentage of Table A amounts for Metropolitan, are 5% under single dry-year conditions (equivalent to 97,000 AF) and 54% under long-term normal conditions (equivalent to 1,034,000 AF).

To address supply needs under dry, below-normal conditions caused by dry hydrologic conditions and regulatory restrictions, Metropolitan developed additional supplies from Central Valley storage and transfer programs. From 2030 through 2050, Metropolitan's final draft 2025 Plan estimates that the SWP's current programs, which include transfers and storage withdrawals, will be capable of serving Metropolitan between:

- 641,0001AF and 723,000 AF in a normal year;
- 662,000 AF and 649,000 AF in a single dry-year; and
- 579,400 AF and 733,200 AF under multiple dry-year hydrology.

In developing its supply capabilities, Metropolitan does not assume the implementation of the Delta Conveyance Project. Metropolitan also assumed near-term actions that would provide annual SWP Table A supplies of 1,095,000 AF in normal years.

Storage Management Programs

Metropolitan relies on water in storage to augment imported supplies. It manages its storage portfolio by storing water during excess supply years to meet the region's needs when Metropolitan's imported water supplies are insufficient to meet annual needs, or if imported water facilities are damaged during a seismic event or other emergency. The amount of water in Metropolitan's storage influences the likelihood that Metropolitan will have adequate supplies to meet projected demands, as well as whether and to what degree it will implement its Water Supply Allocation Plan (WSAP).

The principles that guide the management of supply and storage are based on the framework established in Metropolitan's Water Surplus and Drought Management Plan (Metropolitan, 1999). Currently, Metropolitan has several storage programs in operation that provide flexibility to meet delivery requirements. The storage accounts include groundwater and surface storage programs and facilities within and outside of Metropolitan's service area. Metropolitan's dry-year storage portfolio has the potential to store more than 5 MAF; Metropolitan's dry-year storage was at its highest level (3.8 MAF) at the end of calendar year 2025. Although Metropolitan currently employs its WSAP to allocate supplies, the imposition of the WSAP does not supersede a member agency's preferential right to Metropolitan water.

A member agency can always choose to exercise its preferential right to Metropolitan water rather than follow the WSAP allocation.

From 2030 through 2050, Metropolitan's final draft 2025 Plan indicates that the in-region storage supplies and programs target for "current programs" will be capable of producing between 733,000 AF and 827,000 AF in a normal year; 733,000 AF and 827,000 AF in a single dry-year; and 146,000 AF and 165,000 AF under multiple dry-year hydrology. Metropolitan's ability to utilize its water storage reserves depends on the actual amount of water in storage, facility limitations, the location of the storage, and "take" or "exchange" limits of various storage/exchange programs. Table 6-1 shows Water Authority's projected deliveries from Metropolitan for 2025 through 2050.

TABLE 6-1: PROJECTED IMPORTED WATER DELIVERIES FROM METROPOLITAN TO WATER AUTHORITY (Normal Year - AF/YR)

2025	2030	2035	2040	2045
313,932	293,700	293,700	293,700	293,700

Source: San Diego County Water Authority 2020 Urban Water Management Plan.

6.1.2 Water Authority – IID Water Conservation and Transfer Agreement

On April 29, 1998, Water Authority signed a historic agreement with IID for the long-term transfer of conserved Colorado River water to San Diego County. The Water Authority-IID Water Conservation and Transfer Agreement (Transfer Agreement) is the largest agriculture-to-urban water transfer in United States history; Colorado River water, which is conserved by Imperial Valley farmers, is transferred to Water Authority for use in the County.

On October 10, 2003, Water Authority and IID executed an amendment to the original 1998 Transfer Agreement. This amendment modified certain aspects of the 1998 Agreement to be consistent with the terms and conditions of the QSA and related agreements. It also modified other aspects of the agreement to lessen the environmental impacts of the transfer of conserved water. The amendment was expressly contingent on the approval and implementation of the QSA, which was also executed on October 10, 2003.

On November 5, 2003, IID filed a complaint in Imperial County Superior Court seeking validation of 13 contracts associated with the Transfer Agreement and the QSA. Imperial County and various private parties filed additional suits in Superior Court, alleging violations of the California Environmental Quality Act (CEQA), the California Water Code, and other laws related to the approval of the QSA, the water transfer, and related agreements. The lawsuits were coordinated for trial. The IID, CVWD, Metropolitan, the Water Authority, and state are

defending these suits and coordinating to seek validation of the contracts. In January 2010, a California Superior Court judge ruled that the QSA and 11 related agreements were invalid, because one of the agreements created an open-ended financial obligation for the state, in violation of California's constitution.

The QSA parties appealed this decision, and a stay of the trial court judgment was issued during the appeal. In December 2011, California's Third District Court of Appeal reversed the lower court ruling that invalidated the Transfer Agreement and QSA. The appeals court remanded several issues to the trial court, including questions about whether the QSA was properly processed under CEQA. In July 2013, a Sacramento Superior Court judge entered a final judgment validating the QSA and rejecting all the remaining legal challenges. The judge affirmed all contested actions, including the adequacy of the environmental documents prepared by IID. In May 2015, the state Court of Appeal issued a ruling that dismissed all remaining appeals.

Deliveries into San Diego County from the transfer began in 2003 with an initial transfer of 10,000 AF. The Water Authority received increasing amounts of transfer water each year, according to a water delivery schedule contained in the transfer agreement. In 2019, the Water Authority received 192,500 AF of water, which includes 2,500 AF of early transfer water. The quantities will remain fixed at 200,000 AF for the duration of the Transfer Agreement. The initial term of the Transfer Agreement is 45 years, with a provision that either agency may extend the agreement for an additional 30-year term.

During dry years, when water availability is low, the conserved water will be transferred under IID's Colorado River rights, which are among the most senior in the Lower Colorado River Basin. Without the protection of these rights, the Water Authority could suffer delivery cutbacks.

Based on the terms and conditions in the Transfer Agreement, Table 6-2 shows the anticipated delivery schedule of the conserved transfer water in 5-year increments. There is adequate documentation to demonstrate the availability of this supply, and therefore, the supply yields shown in Table 6-2 will be included in the reliability analysis found in Section 7 of this Plan.

TABLE 6-2: PROJECTED WATER AUTHORITY – IID TRANSFER SUPPLIES (Normal Year - AF/YR)

2030	2035	2040	2045	2050
200,000	200,000	200,000	200,000	200,000

Source: San Diego County Water Authority 2020 Urban Water Management Plan.

6.1.3 Water Authority - All-American and Coachella Canal Lining Projects

As part of the QSA and related contracts, the Water Authority contracted for 77,700 AF/YR of conserved water from projects that lined portions of the All-American Canal (AAC) and Coachella Canal (CC). The projects reduced the loss of water that occurred through seepage, and the conserved water is delivered to the Water Authority. This conserved water will provide the San Diego region with an additional 8.5 MAF over the 110-year life of the agreement.

The CC lining project began in November 2004 and was completed in 2006. Deliveries of conserved water to the Water Authority began in 2007. The project constructed a 37-mile parallel canal adjacent to the CC. The AAC lining project was begun in 2005 and was completed in 2010. The lining project constructed a concrete-lined canal parallel to 24 miles of the existing AAC from Pilot Knob to Drop 3.

The AAC lining project will yield 67,700 AF of Colorado River water per year available for allocation to the Water Authority and San Luis Rey Indian Water Rights Settlement Parties. The CC lining project will yield 26,000 AF of Colorado River water each year available for allocation. The 2003 Allocation Agreement provides for 16,000 AF/YR of conserved canal lining water to be allocated to the San Luis Rey Indian Water Rights Settlement Parties, as discussed in Section 6.1.6 below. The remaining amount (i.e., 77,700 AF/YR) is to be available to the Water Authority each year. The Water Authority will also receive any remaining portion of an available 4,850 AF/YR that is not needed for designated environmental purposes associated with the CC lining project. Under the existing agreements, annual canal lining supplies are delivered in equal monthly installments. According to the Allocation Agreement, IID has call rights to a portion (5,000 AF/YR) of the conserved water upon termination of the QSA for the remainder of the 110 years of the Allocation Agreement and upon satisfying certain conditions.

Table 6-3 shows the anticipated delivery schedule of conserved supplies from the canal lining projects in five-year increments. Adequate documentation exists to demonstrate the availability of this supply, and therefore, the reliability analysis found in Section 7 of this Plan will include the supply yields shown in Table 6-3 as part of the total supply numbers.

TABLE 6-3: WATER AUTHORITY PROJECTED SUPPLY FROM CANAL LINING PROJECTS (Normal Year - AF/YR)

Water Supply Sources	2030	2035	2040	2045	2050
CC Lining Project	21,500	21,500	21,500	21,500	21,500
AAC Lining Project	56,200	56,200	56,200	56,200	56,200
Total	77,700	77,700	77,700	77,700	77,700

Source: San Diego County Water Authority 2020 Urban Water Management Plan.

6.1.4 Water Authority - Carlsbad Seawater Desalination Plant

Development of seawater desalination will assist the region in diversifying its water resources, reduce dependence on imported supplies, and provide a new drought-proof, locally treated water supply. The Carlsbad Desalination Project is a fully-permitted seawater desalination plant and conveyance pipeline developed by Poseidon, a private investor–owned company that develops water and wastewater infrastructure. The Carlsbad Desalination Project, located at the Encina Power Station in Carlsbad, began commercial operation on December 23, 2015, and provides a highly reliable local supply of up to 56,000 AF/YR for the region.

As a result of the forthcoming Encina Power Station decommissioning and termination of the once-through cooling water system and seawater intake pumps, the Carlsbad Desalination Plant is transitioning from co-located operations with the Encina Power Station to permanent stand-alone operations. Recent changes to the existing intake and discharge operations include a direct lagoon intake and fish-friendly pumps; it will also include future construction of new 1 mm screens for seawater process water or brine dilution water. In addition, there is the potential to increase annual average production capacity of the Carlsbad Desalination Plant to 61,600 AF as an adaptive management supply (subject to future supply conditions and future Water Authority Board action). The potential 5,600 AF increment of additional seawater desalination supply from the Carlsbad Desalination Plant could be placed into service prior to 2025.

Table 6-4 shows the estimated annual yield in 5-year increments. Adequate documentation exists to demonstrate the availability of this potential supply in the future, and therefore, the reliability analysis in Section 7 of this Plan will include the supply yields shown in Table 6-4 as part of the total supply numbers.

TABLE 6-4: WATER AUTHORITY PROJECTED SEAWATER DESALINATION SUPPLY (Normal Year - AF/YR)

2030	2035	2040	2045	2050
42,000	42,000	42,000	42,000	42,000

Source: San Diego County Water Authority 2025 Urban Water Management Plan.

6.1.5 Reclamation – Supplemental Water

Under the terms of the San Luis Rey Indian Water Rights Settlement Act (Settlement Act, Public Law 100-675, as amended), 16,000 AF/YR of water conserved from the lining of the AAC and its Coachella Branch shall be furnished by Reclamation for the benefit of the San Luis Rey Settlement Parties (Settlement Parties consist of the Bands – the La Jolla, Rincon, San Pasqual, Pauma, and Pala Bands of Mission Indians – and the Local Entities – the City of Escondido and the District)

(Supplemental Water). Through agreements completed in conjunction with the QSA, Metropolitan and the Water Authority have agreed to wheel Supplemental Water to the Settlement Parties. The San Luis Rey Indian Water Rights Settlement Agreement (Settlement Agreement) and related contracts became effective on May 17, 2017. Since that time, Supplemental Water has been delivered to the Settlement Parties per the terms of the Settlement Agreement. The Settlement Act and Settlement Agreement are perpetual instruments, and the Supplemental Water shares a high priority for allocation from the Colorado River, along with IID and ahead of Metropolitan and the Water Authority, per the terms of the California Seven Party Agreement of 1931. Per the Settlement Act, Supplemental Water may only be used by the Bands on their reservations or by the Local Entities in their service areas.

Under the terms of the Settlement Agreement, the Bands are responsible for any costs associated with procuring or wheeling Supplemental Water and have the right to:

- Use any or all of the Supplemental Water on their reservations;
- Exchange a portion of Supplemental Water for an equal volume of Local Water (ground and surface water originating in the San Luis Rey River basin) furnished by the Local Entities; and
- Sell any Supplemental Water that is surplus to their needs to the Local Entities (Surplus Supplemental Water).

The Local Entities are obligated to purchase any Surplus Supplemental Water offered by the Bands to offset any other source of supply they may have. To the extent possible, the Local Entities each receive equal amounts of Supplemental Water within their respective service areas.

As there is 16,000 AF of Supplemental Water delivered to the Settlement Parties each year, the maximum amount of Supplemental Water received by the District in any calendar year would be 8,000 AF.

Presently, the only Band using an increment of Supplemental Water on their reservation is the San Pasqual Band of Mission Indians, wheeling Supplemental Water through the Valley Center Municipal Water District. The San Pasqual Band estimates their Supplemental Water usage for the foreseeable future to be about 200 AF/YR, therefore the net delivery of Supplemental Water to the District is estimated to be 7,900 AF/YR. Over time, the Bands may develop additional uses of Supplemental Water on their reservations, thereby reducing the amount of Supplemental Water delivered to the Local Entities; however, this is not forecast to occur within the timeframe considered in this Plan.

6.2 GROUNDWATER

In 2018, the District prepared an assessment of the Warner Basin aquifer and concluded that the District could extract up to 9,100 AF/YR of groundwater from the aquifer on a sustainable long-term basis. This groundwater is pumped into Lake Henshaw for storage and subsequent delivery to the District, the City of Escondido and the Rincon Band of Indians. Because the pumped groundwater is stored in an open reservoir where it blends with surface run-off, it is reported as surface water production. Historically, about 40 percent of the groundwater production is distributed for District use, 40 percent is distributed to the City of Escondido, and 20 percent is distributed to the Rincon Band under the terms of the Settlement Agreement. The wellfield is comprised of 11 wells with groundwater levels ranging from 150 to 350 feet below surface, depending on hydrology and pumping history.

6.2.1 Basin Description

The Warner Basin comprises 24,000 acres and is one of 515 alluvial groundwater basins and sub-basins recognized by the State and described in DWR Bulletin 118.

Over the last 50 years, the District has commissioned several studies of its local water supplies, which have also evaluated the characteristics of the Warner Basin. These studies have each had different objectives, utilizing different hydrogeologic assumptions, and benefiting from different historical data sets. A 2002 study estimated that the total usable Warner Basin aquifer storage is about 400,000 AF, only about 150,000 AF of active storage volume is in the aquifer where extraction is feasible using currently operating District wells.

6.2.2 Groundwater Management

The District has 11 production wells that pump from depths of 150 to 350 feet, depending on rainfall and length and extent of pumping operations. The District's operational procedure is to preferentially use surface water runoff when available and conserve groundwater for dry years when surface runoff is inadequate to meet Local Water production objectives.

In dry years, groundwater is pumped from the wellfield into Lake Henshaw and released as needed. In wet years, surface water runoff is adequate to meet supply objectives and pumping operations cease, permitting the basin to recharge and groundwater levels to rise. This conjunctive use of groundwater and surface water runoff allows for the most efficient long-term sustainable yield from the local water system.

In September 2014, the SGMA was signed into law. The law provides new tools and authorities for local agencies to manage groundwater resources within their jurisdiction to achieve a sustainable use of those resources within a 20-year implementation period. While SGMA provides specific mandates only for those groundwater basins deemed by the State to be "medium" or

"high" priority groundwater basins, the law encourages the formation of GSAs and the preparation of "GSPs for all groundwater basins, even those deemed "low" and "very low" priority basins.

While DWR has classified the Warner Basin as a "very low" priority basin, it represents a significant water source for the District. The District is not presently considering the formation of a GSA in the Warner Basin but may choose to employ this groundwater management tool in the future.

6.2.3 Overdraft Conditions

The Warner Basin aquifer has not been adjudicated, nor has it been identified as being in overdraft, as indicated by its classification as a "very low" priority basin as described in the previous section.

6.2.4 Historical Groundwater Pumping

The District studies indicate that it has about 150,000 AF of usable storage. Since 1960, the District's average groundwater production has been 6,950 AF/YR. The last five years of total groundwater production are summarized in Table 6-5.

TABLE 6-5: HISTORICAL GROUNDWATER PRODUCTION (AF/YR)
(Non-Potable)

	2021	2022	2023	2024	2025
Production	4,049	8,386	3831	116	8

6.3 SURFACE WATER

In 1946, the District purchased the Warner Ranch, which included Henshaw Dam and Lake Henshaw. Lake Henshaw was the District's sole supply of water until the formation of the Bueno Colorado Municipal Water District in 1954. Since that time, approximately 15 to 20 percent of the District's supply of water has come from Lake Henshaw and 80 to 85 percent from Water Authority. Table 3-3 shows the amount of water received from both sources from FY 1990-91 through FY 2019-20.

Lake Henshaw is a 51,832 AF capacity water supply reservoir located on the San Luis Rey River, about 25 miles east of the District service area; incidental recreational opportunities, including camping, fishing, boating and seasonal waterfowl hunting, are managed by a concessionaire under contract with the District. The 200 square mile watershed is largely undeveloped and consists of a mix of grassland, chaparral, and oak and coniferous forests. About one third of the

watershed is owned by the District and is managed to protect water quality. The undeveloped character of the watershed and the District's management activities contribute to the high quality of this local water supply.

Both natural run-off developed above Lake Henshaw and groundwater pumped from the Warner Basin are held as surface water in Lake Henshaw. The water is delivered to the District, City of Escondido and Rincon Band of Indians under terms of several governing contracts. While the amount of water delivered to each party is dependent on annual hydrologic conditions, the average local water delivery to the District since 1960, including groundwater production and surface water run-off, is 5,918 AF/YR.

The District has resolved the longstanding dispute over the use of the waters of the San Luis Rey River with the implementation of the Settlement Agreement and related agreements, which became effective on May 17, 2017. This agreement among the United States of America, La Jolla, Rincon, San Pasqual, Pauma, and Pala Bands of Mission Indians, San Luis Rey Indian Water Authority, City of Escondido, and the District secures the long-term rights of the Settlement Parties, including the District, to divert and use the water of the San Luis Rey River and the Warner Basin. While the Settlement Agreement preserves much of the status quo regarding the use of local water, the District estimates that the long-term yield of local water for the District will be modestly reduced to about 2,700 AF/YR until the wellfield can be upgraded and/or additional wells added. Table 6-6 shows current and projected local surface water supply deliveries in five-year increments.

TABLE 6-6: PROJECTED LOCAL SURFACE WATER SUPPLY (Normal Year - AF/YR)

2025	2030	2035	2040	2045
2,700	2,700	2,700	4,700	4,700

6.4 STORMWATER

The District does not have a stormwater recovery system; however, it works with the City of Vista to minimize irrigation run-off, thus lessening the burden that this source puts on the stormwater system.

6.5 WASTEWATER AND RECYCLED WATER

6.5.1 Recycled Water Coordination

The District Board of Directors approved a Water Reclamation Master Plan (WRMP) in August 1995. The goal was to reduce potable water demand within the District's service area by providing recycled water to certain targeted customers. Upon implementing the recommended phases of the

WRMP approximately 2,200 AF of recycled water could be available for distribution within the District on an annual basis. This would require significant investments in treatment, storage and

distribution infrastructure by the City of Vista and the Buena Sanitation District. Currently, there is no recycled water being delivered to customers in the District's service area.

During the development of the WRMP, agencies that provide wastewater service within the District's jurisdictional boundaries, as well as the Water Authority, were contacted to obtain information about existing and planned reclamation infrastructure and to identify a potential market for recycled water. Several of the agencies provide both water and wastewater services. The following agencies were contacted and provided data and other information during the development of the WRMP and received copies of the WRMP: City of Vista/Buena Sanitation District (wastewater), City of Oceanside (water and wastewater), Encina Wastewater Authority (wastewater), the Water Authority (water wholesaler) and Vallecitos Water District (water and wastewater).

The Water Authority completed a Regional Recycled Water System Study in March 2002, which found that there is an imbalance in the geographic locations of the recycled water sources and market. The Study did note that a regional system could be created by incorporating existing Water Authority facilities into other local agencies' future recycled water system expansions, thereby linking recycled water production facilities with markets.

In June 2010, the District joined the Olivenhain Municipal Water District, Carlsbad Municipal Water District, Vallecitos Water District, Santa Fe Irrigation District, City of Oceanside, Leucadia Wastewater District, City of Escondido, Rincon Del Diablo Municipal Water District and the San Elijo Joint Powers Authority (North San Diego Water Reuse Coalition) to investigate the expanded use of recycled water within north County. In 2013, the Coalition had an engineering report prepared that analyzed existing and proposed recycled water facilities and evaluated each of the participating agencies' ability to interconnect and maximize the use of recycled water within their combined service areas. The report identified a potential recycled water demand of 1,840 AFY (including the Shadowridge Golf Course) and considered using the SWRF failsafe outfall as a conduit for delivering recycled water from the City of Carlsbad to the District. The long-term potential recycled water demand was estimated to be over 3,000 AFY. The facilities required included significant investment in pipeline facilities to reach the proposed recycled water customers.

The Shadowridge Golf Course drilled a groundwater well on their property and removed turf to reduce its demand on potable water, which negatively impacted the economic feasibility of the project. The District subsequently agreed to allow transfer of Round 2 Proposition 84 construction grant funding for this proposed project to the City of Oceanside. Currently, there are no foreseeable plans to move forward on any recycled water projects.

6.5.2 Wastewater Collection, Treatment and Disposal

City of Vista Wastewater Collection System

The City of Vista's wastewater collection system includes approximately 229 miles of public sewer mains and trunks ranging in size from 6 to 42 inches in diameter and one pump station serving about 16,000 parcels. The Vista system conveys an annual average flow of 6.9 MGD. The cities of Vista and Carlsbad share ownership of an interceptor sewer, which routes sewage over 7 miles through two pump stations and force mains to the Encina Water Pollution Control Facility (EWPCF).

Buena Sanitation District Collection System

The Buena Sanitation District wastewater collection system, which is operated and maintained by the City of Vista, is comprised of 106 miles of public sewer mains and trunks ranging in size from 4 to 30 inches in diameter and one pump station serving over 5,300 parcels. The Buena system conveys an annual average flow of just over 2 MGD. Sewer collected by the Buena system flows about 5.5 miles through one pump station to the EWPCF.

Shadowridge Water Reclamation Plant

The SWRF was built in 1986 to provide wastewater treatment for the Shadowridge development and recycled water service for golf course irrigation. The facility was owned by Buena Sanitation District/City of Vista. In August 1995, the District approved a Water Reclamation Master Plan, with a goal of reducing potable water demand by providing recycled water to certain targeted customers. The WRMP identified approximately 2,200 AF of recycled water demand that could be available for distribution within the District's service area on an annual basis. This plan required significant investments in treatment, storage and distribution infrastructure by the City of Vista and the Buena Sanitation District and was never implemented.

In 2003, the SWRF was decommissioned as treatment capacity became available at Encina, and it was no longer financially feasible to operate the SWRF. Currently, there is no recycled water being delivered to customers in the District's service area and no foreseeable plans to do so within the period covered by the 2025 Plan.

Distribution System

Water Code Sections 13555.2 and 13555.3 enacted in 1992 encourage new developments in areas where recycled water is available, or planned to be available, to provide separate plumbing systems to accommodate the use of recycled water. Any California community with more than 3,000 customer connections is required to comply with this code section. The District had encouraged developers to install dual plumbing systems since 1992. However, developers have not been required to install dual pipeline since there are no recycled water supplies available.

Encina Water Pollution Control Facility

Encina Wastewater Authority manages wastewater collection and treatment for the City of Vista and other north county cities and special districts. Currently, all the wastewater from the City of Vista (excluding storm water run-off), is conveyed to and treated at the EWPCF. The facility is located on the Pacific coast in the City of Carlsbad approximately seven miles west of the District's service area.

EWPCF, designed with an ocean outfall for wastewater disposal, began treating countywide wastewater in 1965. EWPCF has a treatment capacity of 36 MGD. Wastewater is treated to secondary standards, which means that the entire volume of wastewater that is processed at the facility has the potential to be used as recycled water.

6.5.3 Recycled Water System

In its 2020 Plan, the District anticipated distributing no recycled water annually (2025 to 2045). The District has not distributed any recycled water to the golf course and does not anticipate distributing any recycled water annually during the period covered by the 2025 Plan (2030 to 2050) or in periods covered by future plans. The golf course is currently using well water for irrigation purposes.

6.5.4 Recycled Water Beneficial Uses

It is unlikely that any recycled water will be distributed during the period covered by the 2025 Plan (or periods covered by future plans), unless it becomes economically feasible to re-commission the SWRP and the Buena Sanitation District/City of Vista begins treating wastewater at the facility once again, or the District is able to purchase and transport recycled water from a neighboring agency so it can be delivered to the golf course via its existing distribution system. Due to the uncertainty of a recycled water source, it is assumed that no recycled water will be supplied within the District through 2050.

6.5.5 Actions to Encourage and Optimize Future Recycled Water Use

With the SWRP decommissioned, the District does not have the ability to deliver any recycled water to customers. Due to the uncertainty of any recycled water source and the uncertainty whether a regional recycled water project would bring another source into its service area, the District has not pursued ways to distribute recycled water to potential customers. It is unlikely that additional recycled water will be distributed during the period covered by this Plan.

6.6 DESALINATED WATER OPPORTUNITIES

As stated in the UWMP Act, a Plan shall describe opportunities for the development of desalinated water, including but not limited to, ocean water, brackish water and groundwater, as a long-term supply. By virtue of its location, the District does not have an opportunity to develop its own desalination project. However, as a member agency of the Water Authority, the District receives desalinated seawater from the regional desalination facility in Carlsbad. Subsection 6.1.4 provides more detailed information on the Water Authority's desalination efforts.

6.7 EXCHANGES OR TRANSFERS

The District currently has water system inter-ties with four of its neighboring water retailing agencies, Vallecitos Water District, Rincon del Diablo Municipal Water District, the City of Escondido and the City of Oceanside. These inter-ties are for the purpose of transferring limited amounts of water between agencies during emergencies and short-term planned or unanticipated water system outages.

As described in subsection 6.1.2, the Water Authority has engaged in a transfer with the IID. Under this agreement, water conserved by IID will be transported by Metropolitan through the CRA and delivered to the Water Authority.

6.8 FUTURE WATER SUPPLY PROJECTS

The District is in the initial planning phase of a wellfield optimization project to increase the yield of the District's wells located on warner ranch. It is anticipated that this project will provide an additional 2,000-acre feet of water beginning in 2040, indicated in Table 6-9.

As documented in this Plan, the District will rely on the Water Authority to supply a growing percentage of future water demands as well as the surplus supplemental water from the settlement agreement received via the Water Authority. The Water Authority and Metropolitan are pursuing projects to diversify and enhance their supplies. Due to the reliance on these two agencies, the District's 2025 Plan contains information on the current and future water supply projects of Metropolitan and the Water Authority. Section 6.1, Purchased or Imported Water, describes future water supply projects and programs for both agencies, and Chapter 7, Water Supply Assessment Reliability, provides summary information on each agency's supply reliability. Details regarding the Water Authority's and Metropolitan's future water supply projects and programs and supply reliability can be found in each agency's 2025 Plan.

6.9 SUMMARY OF EXISTING AND PLANNED SOURCES OF WATER

The District plans to use its local water supply, as described in detail in this subsection, in conjunction with water received from the Water Authority to meet demands in its services area. If the District delivers its local water supply as projected and the Water Authority and Metropolitan's supplies are developed as planned, no shortages are anticipated within the District's service area in a normal year.

Table 6-7 provides total quantities of current and planned water supplies for the District in a normal year (NOTE: The quantities shown in the table below assume the implementation and achievement of SBX 7-7 conservation goals).

TABLE 6-7: CURRENT AND PLANNED WATER SUPPLIES (Normal Year - AF/YR)l

Water Supply Sources	2025	2030	2035	2040	2045	2050
Purchased from Water Authority	3,960	5,550	5,769	4,006	4,096	4,186
Provided by Reclamation	7,900	8,000	8,000	8,000	8,000	8,000
VID surface water diversions	5,121	2,700	2,700	4,700	4,700	4,700
VID produced groundwater	-	-	-	-	-	-
Recycled Water	0	0	0	0	0	0
Total	**16,981**	**16,250**	**16,469**	**16,706**	**16,796**	**16,886**

6.10 WATER QUALITY

The UWMP Act requires that the 2025 Plan include information, to the extent practicable, on the quality of existing supply sources and the way water quality affects water management strategies and supply reliability. This section summarizes water quality issues associated with supplies serving the District. Information on imported and regional water supplies was taken from the Water Authority's 2025 Plan.

Water agencies treat all water to meet stringent state and federal drinking water standards before delivering it to customers. However, source water of poor quality will make it increasingly expensive and difficult to meet those standards.

6.10.1 Colorado River

The Colorado River is the primary source of the Water Authority's imported water supply. High salinity levels, uranium, and perchlorate contamination represent the primary areas of concern with the quality of Colorado River supplies. Managing the watershed of the Colorado River has been the most effective method for controlling these elements of concern.

Salinity

Salts in the Colorado River system are indigenous and pervasive, mostly resulting from saline sediments in the Colorado River Basin that were deposited in prehistoric marine environments. These indigenous salts are easily eroded, dissolved, and transported into the river system. Progressive agricultural development and water diversions over the past 50 years have also increased already high, naturally occurring TDS concentrations in the Colorado River.

Colorado River water salinity at Parker Dam, where the San Diego region's river supplies are diverted, have averaged between 537-760 mg/L since 1970 (Reclamation, 2025). Salinity is variable depending on hydrologic conditions. During the high-water flows from 1983 to 1986, salinity in the Colorado River Aqueduct dropped to a historic low of 525 mg/L. However, during the 1987 to 1992 drought, higher salinity concentrations returned. High TDS concentrations in water supplies lead to high TDS concentrations in wastewater, which lowers the usefulness of the wastewater and increases the cost of recycled water. Refer to Chapter 7.7 Recycled Water for more information about salinity impacts on water recycling. In addition to the link between

water supply and water quality, high TDS concentrations in water supplies can damage water delivery systems and home appliances. From 2010 to 2014, the TDS concentrations in Lake Havasu in Arizona and Lake Mathews in Riverside County ranged from 570 to 640 mg/L. These lakes contain 100% Colorado River water. TDS concentrations in Lake Havasu were measured at 683 mg/L in December 2023 and 619 mg/L in December 2024. Salinity in the Colorado River is expected to increase as development increases in the Basin.

To reduce the effects of high TDS concentrations on water supply reliability, Metropolitan approved its Salinity Management Policy in April 1999 (Metropolitan, 1999). One of the policy goals is to blend Colorado River supplies with less saline water from the State Water Project to achieve salinity concentrations of less than 500 mg/L TDS. Since 1976, TDS concentrations in Metropolitan's Colorado River supply have averaged approximately 630 mg/L. In addition, and to foster interstate cooperation on this issue, the seven Basin states that use Colorado River water formed the Colorado River Basin Salinity Control Forum in 1973. To lower TDS concentrations in Colorado River supplies, the CRBSCF coordinates salinity control efforts among the seven Colorado River Basin states and works with federal agencies to implement the Colorado River Basin Salinity Control Program, designed to prevent a portion of the naturally abundant salt supply from moving into the river system. The Program targets the interception and control of non-point sources, such as surface runoff, as well as wastewater and saline hot springs.

Examples of salinity control measures include improved irrigation practices, rangeland management, and the operation of a deep well brine injection project called the Paradox Valley Unit (PVU). The PVU has been a key salinity control project in the Colorado River's Upper Basin despite operating at reduced capacity due to seismicity concerns. The PVU is one of the original

salinity control projects authorized for construction under the Salinity Control Act and is composed of a series of brine collection wells that extract brine groundwater to prevent it from entering the Dolores River, a major Colorado River tributary. The extracted brine groundwater is injected under high pressure, deep underground. The PVU prevented approximately 100,000 tons of salt from entering the river annually until its unplanned closure in March 2019 due to significant seismic activity. PVU operations resumed on an interim basis in June 2022 at two-thirds of capacity, providing approximately 65,000 tons of annual salinity control. Reclamation has not reported any significant seismic activity to date; however, the PVU is reaching the end of its useful life. Reclamation is working with the Colorado River Basin states to develop a solution that continues to protect water quality and maintain salinity control. Combined, salinity control projects remove over a million tons of salt from the Colorado River water annually, resulting in reduced salinity concentrations in the Lower Colorado River Basin of approximately 100 mg/L as a long-term average (Reclamation, 2025).

Perchlorate

Perchlorate was first detected in Colorado River water in June 1997 and was traced to the Las Vegas Wash. The source of contamination was found to be emanating from two chemical manufacturing facilities in Henderson, Nevada (USEPA, 2016). The Nevada Division of Environmental Protection manages a comprehensive groundwater remediation program in the Henderson area. The amount of perchlorate loading into the Las Vegas Wash has been reduced from over 1,000 pounds per day prior to treatment to 50-90 pounds per day since early 2007, more than a 90 percent reduction of the perchlorate loading into the Colorado River system. As a result of aggressive cleanup efforts, perchlorate in the Colorado River water at Willow Beach, Arizona, approximately 11 miles downstream of Hoover Dam, has decreased significantly from a peak of 9.7 µg/L in June 1999 to1 µg/L 2019 (as compared to the California MCL of 6 µg/L).

Uranium

Naturally occurring uranium is continually present in Colorado River water, reported under state MCL of 20 pCi/L at Metropolitan's Colorado River intake. Uranium impacts to water quality have been identified from upstream mining in Moab, Utah, and other potential mining sites in the western United States. Currently, the United States Department of Energy is actively planning to remove mine tailings, and through April 2025, has disposed over 15.5 million tons, or 97% of the estimated 16 million tons, of uranium tailings from the banks of the Colorado River. This will improve groundwater quality on the Colorado River watershed near Moab, with completion of cleanup anticipated in 2029 (USDOE, 2023). Current levels at Metropolitan's intake water have ranged from 1 to 6 pCi/L, below the MCL. Potential future impacts to water quality include new mining operations and expansion of nuclear fuel production if developed in proximity to the Colorado River. In January 2012, a 20-year moratorium on new uranium mining claims went into effect and remains in place (Metropolitan, 2021).

Nutrients

The Colorado River system has historically been low in nutrients, however new population growth in watershed areas has created a concern for these constituents. Metropolitan is involved with upstream entities along the lower Colorado River to enhance wastewater management to control nutrient loading, especially phosphorus. The Colorado River historically low nutrient level has been important for blending with State Water Project water to reduce nutrient levels delivered to retail water agencies and cities that supply water directly to consumers in the San Diego region.

Invasive Mussels

In January 2007, quagga mussels were found in the lower Colorado River basin, and zebra mussels were found in the upper Colorado River basin in July 2024. These invasive species pose significant challenges to water quality and infrastructure along the Colorado River. Quagga and zebra mussels have dense populations which can alter aquatic ecosystems by filtering large volumes of water, removing phytoplankton, and disrupting the natural food web. This filtering can increase water clarity but may also lead to excessive aquatic plant growth and changes in nutrient cycling. Quagga and zebra mussels can rapidly colonize hard surfaces, including intake structures, pipelines, and treatment facilities, leading to increased maintenance costs and operational disruptions (CDFW, 2025). These impacts can complicate treatment processes, reduce conveyance efficiency, and require additional monitoring and control measures to maintain reliable water delivery and quality. Metropolitan implements a multi-layered approach to control quagga and zebra mussel proliferation in the Colorado River Aqueduct, including chemical control through chlorine injections, physical removal during annual shutdowns, and detection and monitoring of mussel larvae. Metropolitan also implements a boater education and inspection campaign at Diamond Valley Lake marina to protect water quality and infrastructure at the lake.

In 2024, the invasive golden mussel was detected in the Sacramento-San Joaquin Delta. Like quagga and zebra mussels, golden mussels pose a significant threat to the ecological health of reservoirs, water intake and conveyance systems, and water quality. However, golden mussels can survive in a wider range of conditions than quagga or zebra mussels (California State Parks, 2025). The state has developed comprehensive plans to prevent further introduction and spread of invasive mussels, as well as to contain and suppress infestations to minimize their impacts. In collaboration with the DWR, Metropolitan conducts routine monitoring of its water systems and additional State Water Project sites. In October 2025, Metropolitan detected golden mussel veligers (the mussel's free-floating larval stage) in its system in the influent to the Mills Treatment Plant (Metropolitan, 2025). Metropolitan and other agencies are monitoring water systems and assessing mussel control strategies.

Arsenic

Arsenic is another naturally occurring element monitored by drinking water agencies. Between 2010 and June 2025, arsenic concentrations in Metropolitan's Colorado River source water range from 1.9 to 3.7 µg/L (Metropolitan, 2026). Increasing coagulant doses at water treatment facilities can reduce arsenic concentrations for retail water deliveries.

Chromium-6

Metropolitan has actively monitored Colorado River water for chromium-6. Most monitoring results have been below the detection limit for reporting, but when detected, levels range from 0.03 to 0.085 µg/L (Metropolitan, 2021). Between 1951 and 1985, Pacific Gas & Electric Company used chromium-6 as an anticorrosion agent for cooling towers at a gas compressor station located along the Colorado River near Topock, Arizona (DTSC, 2020). This is a toxic cleanup site. Chromium-6 monitoring results from the Colorado River upstream and downstream of this site have been below the detection limit for reporting.

6.10.2 State Water Project

The key water quality issues for the State Water Project are DBP precursors, in particular, TOC, bromide, and low alkalinity. Bromide and TOC combine with chemicals used for water treatment, forming DBPs that are regulated under the federal SDWA. Low alkalinity water requires a higher percentage of total organic carbon removal to reduce disinfection byproduct formation. Wastewater discharges from cities and towns surrounding the Delta also add salts and pathogens to Delta water, influencing suitability for drinking and recycling water supplies (Metropolitan, 2021).

In the CALFED Bay-Delta Program (CALFED) 2000 Record of Decision, CALFED will either achieve water quality targets at Clifton Court Forebay, a State Water Project facility, and drinking water intakes in the south and central Delta or will achieve an "equivalent level of public health protection using a cost-effective combination of alternative source waters, source control, and treatment technologies" (SWRCB, 2000).

Actions to protect Delta fisheries have impacted Delta water quality problems by requiring the State Water Project to shift diversions from spring to fall, when salinity and bromide concentrations are higher. Closure of the Delta Cross-Channel gates to protect migrating fish has also degraded State Water Project water quality by reducing the flow of higher-quality Sacramento River water to the State Water Project pumps at critical times. This can result in increased salinity and bromide concentrations in water delivered to Southern California.

In 2013, the Delta Stewardship Council released The Delta Plan includes policies and recommendations to achieve "coequal goals", which means the two goals of providing more

reliable water supply for the state and protecting, restoring, and enhancing the Delta ecosystem (Delta Stewardship Council, 2013). In 2016, USBR and DWR developed California WaterFix, a twin-tunnel solution focused on conveyance and ecosystem improvements to significantly reduce reverse flows and fish species impacts associated with the existing south Delta intakes. In 2019, Governor Newsom directed state agencies to proceed with modernizing Delta infrastructure with a single-tunnel project (as part of the state water resilience portfolio approach). In response, DWR has proposed construction of a new, single-tunnel Delta Conveyance Project with intakes in the north Delta. By moving the intakes upstream, the project intends to improve water quality for south-of-Delta exporters and allow for increased deliveries in wet years. The Delta Conveyance Project is currently envisioned to include two new intakes along the Sacramento River, a tunnel to work as a dual facility with the existing Delta waterway to transfer water to the existing state and federal pumping facilities, and environmental mitigation in compliance with state and federal environmental laws. In 2024, DWR certified the project Environmental Impact Report, and project permitting is expected to be complete by the end of 2026. This project will require broad support and funding commitments to implement.

The water quality issues are shown below in order of their magnitude for this water supply.

Total Organic Carbon and Bromide

A key water quality issue for the State Water Project is DBPs, particularly from TOC and bromide. TOC and bromide are naturally occurring in water, but concentrations increase several-fold in State Water Project supplies due to agricultural runoff and seawater intrusion as water moves through the Delta. TOC and bromide form DBPs, a water quality concern, when treated with disinfectants such as chlorine. Some DBPs have been identified and are regulated under SDWA, and others are not yet identified. Existing levels of bromide and TOC in Delta water supplies may present challenges for water utilities when complying with regulations. Metropolitan has complied with DBP regulations since they became effective.

Treating water supplies to DBP standards is accomplished by different methods:

- Metropolitan's treatment facilities serving the San Diego region have upgraded to the use of ozone as a primary disinfectant to treat challenging water sources, such as State Water Project supply, and continue to meet DBP standards.
- Some local treatment facilities use chlorine dioxide as a primary disinfectant to reduce DBP formation.
- Blending of State Water Project source water with Colorado River water reduces precursors and DBP formation.

Nutrients

SSWP supplies have significantly higher nutrient levels than Colorado River supplies. Elevated levels of nutrients can increase nuisance algal and aquatic weed growth, affecting taste and odor in product water and potentially reducing filter run times at WTPs. Nutrient-rich soils in the Delta, agricultural runoff, and wastewater discharges are primary sources of nutrient loading in the State Water Project water supply. Water agencies receiving Delta water have been engaged in efforts to minimize the effects of nutrient loading from Delta wastewater plants. Sacramento Area Sewer District, the primary wastewater discharger to the Sacramento River, completed treatment facility upgrades in 2023 to comply with its 2010 discharge requirements for ammonia and nitrate removal. In 2014, the city of Stockton Regional Wastewater Control Facility, a significant discharger to the San Joaquin River, was issued waste discharge requirements with more stringent nitrogen limits. In 2023, the city of Stockton completed the upgrades needed to meet new nitrogen limits.

During drought, low flows, increased temperatures, and increased nutrient concentrations can increase algal blooms, which then produce algal toxins. Of particular concern is microcystins, a harmful species of cyanobacteria. DWR increases application of copper compounds to control algal and aquatic weed growth during drought. Consumers may notice changes in the taste and odor of their water due to Delta nutrients depending on the blend of imported water delivered through Metropolitan. Metropolitan developed a comprehensive program to monitor and manage algae in its source water reservoirs and to provide early warning of algal-related problems, taste, and odor events. Increased monitoring, response and oversight, and proactive management of reservoir water quality will ensure a safe water supply. Although current nutrient loading is a concern with potential cost implications, there should be no impact on availability of water supplies to Metropolitan given its monitoring program and response actions. Metropolitan's source water protection program will continue to focus on preventing future increases in nutrient loading resulting from urban and agricultural sources.

Salinity

Water supplies from the State Water Project have significantly lower TDS concentrations than the Colorado River, averaging 250 mg/L in water supplied through the East Branch and 325 mg/L through the West Branch (Metropolitan, 1999). Because of this lower salinity, Metropolitan blends State Water Project water with high-salinity Colorado River Aqueduct water to reduce salinity in delivered water. However, both supply and TDS concentrations in State Water Project water can vary significantly in response to hydrologic conditions in the Sacramento–San Joaquin watersheds. Potential salinity intrusion in the Delta due to sea-level rise as a result of climate change could also present a risk for increased TDS concentrations in State Water Project supplies. TDS concentrations in State Water Project water can also vary widely over short periods of time. These variations reflect seasonal and tidal flow patterns, and they pose an additional problem for blending as a management tool to lower TDS concentrations in Colorado River Aqueduct water supply. For example, during the 1977 drought, the salinity of State Water Project water reaching Metropolitan increased to 430

mg/L, and supplies became limited. During this same event, water salinity at Metropolitan's Harvey O. Banks Pumping Plant exceeded 700 mg/L. Under similar circumstances, Metropolitan's 500 mg/L salinity objectives could only be achieved by reducing imported water from the Colorado River Aqueduct. Thus, it may not be possible to maintain both salinity standards and water supply reliability unless salinity levels of source supplies can be reduced.

TDS objectives are included in Article 19 of the SWP Water Service Contract, which specifies a ten-year average of 220 mg/L and a maximum monthly average of 440 mg/L. Because these objectives have not yet been met, the State, Metropolitan, and other agencies are coordinating to implement programs aimed at reducing salinity in Delta supplies. These programs include modification of agricultural drainage and development of comprehensive basin plans. Gates and channel barriers have also been placed in strategic locations in the Delta to reduce salt transportation from seawater. In 2015 and in 2021, a temporary rock barrier was installed in False River to help limit salt intrusion from the San Francisco Bay into the central Delta during those periods of drought emergency. The Delta Conveyance Project is designed to reduce salinity in State Water Project supplies by diverting a greater percentage of flows from the lower salinity Sacramento River (Metropolitan, 2021).

Arsenic

Between 2010 and 2025, arsenic concentrations in State Water Project water have ranged from non-detect to 6.8 µg/L. Increasing coagulant doses at WTPs can reduce arsenic levels for retail deliveries. Some of Metropolitan's State Water Project groundwater storage programs appear to be vulnerable to arsenic contamination; as a result, Metropolitan has had to restrict flow from one program to limit arsenic increases in the State Water Project and an arsenic treatment facility was developed by one of Metropolitan's groundwater partners, which has increased groundwater supply costs. Non-project deliveries of groundwater to the California Aqueduct increase during drought periods. Although groundwater being pumped into the aqueduct contains arsenic in concentrations above the MCL, arsenic in blended water remains below the MCL. The intent of the blending is to manage inflows so that the arsenic concentrations do not exceed 10.0 µg/L. Arsenic levels in Metropolitan's water treatment plant effluents ranged from non-detect to 4.4 µg/L between 2010 and June 2025 (Metropolitan, 2026).

1, 2, 3-Trichloropropane

1,2,3- Trichloropropane (1,2,3-TCP) is a human-made carcinogenic chemical that has contaminated groundwater throughout the state, primarily in the Central Valley. In December 2017, SWRCB established an MCL of 0.005 µg/L. There have been no TCP detections in

Metropolitan's source water, but some of Metropolitan groundwater storage programs in the Central Valley that can move water into the California Aqueduct have been affected. After detection of TCP above the MCL in groundwater wells in Kern County, Metropolitan temporarily suspended operation of this program until water quality concerns can be further evaluated and managed. The levels of TCP detected in Metropolitan's other Central Valley groundwater storage programs are much lower and impact fewer groundwater wells. Metropolitan is evaluating the effects of TCP on the return capability of those programs (Metropolitan, 2021).

6.10.3 Surface Water

The region's water quality is influenced by a variety of factors depending on its source. As stated above, water from the Colorado River and from Northern California are vulnerable to several contributors to water quality degradation. Regional surface and groundwater are primarily vulnerable to increasing urbanization in the watershed, agriculture, recreational uses, wildlife, and fires.

Surface water protection is fundamentally important to all of California. The State Board requires large utilities delivering surface water to complete a watershed sanitary survey every five years to examine possible sources of drinking water contamination. The survey includes suggestions on how to protect water quality at the source.

In 2021, the District, in conjunction with the City of Escondido, prepared a watershed sanitary survey (which includes a source water assessment) for the local watershed. The survey assessed activities that had the potential to influence the quality of water delivered from Lake Henshaw, Dixon Lake and Lake Wohlford. While the survey identified several activities that have the potential to adversely affect water quality, including residential septic facilities, highway run-off, and agricultural and recreational activities, no contaminants from these activities have been detected in the local water supply.

The United States Environmental Protection Agency (EPA) also requires utilities to complete a Source Water Assessment (SWA). Information collected in SWAs is used to evaluate the vulnerability of water sources to contamination and any changes in potential sources of contamination to help determine if more protection measures are needed. EPA requires utilities to complete a SWA that uses information collected in the sanitary surveys.

Metropolitan completed its SWA of its Colorado River and SWP supplies in December 2002. According to the assessment, Colorado River supplies are considered most vulnerable to impacts from recreation, urban/storm water run-off, increasing urbanization in the watershed and wastewater. SWP supplies are most vulnerable to contamination from urban/storm water run-off, wildlife, agriculture, recreation and wastewater. Metropolitan also

completed watershed sanitary surveys of its source water supplies from the Colorado River in 2020 and the SWP in 2021.

In the past, regional surface water quality was considered good to excellent. Water quality can vary with imported water inflows and surface water contamination. Surface water protection is considered a key element in regional water quality. Currently, the most significant water quality issue that affects the public is algae blooms, which can create taste and odor problems, or generate algal toxins. Algae blooms are typically caused by runoff containing nutrients and build-up of those nutrients in local reservoirs.

Harmful algal blooms (HABs) observed in Lake Henshaw in 2020 prevented normal water deliveries. The District and the City of Escondido prepared a Harmful Algal Bloom Management and Mitigation Plan for Lake Henshaw and Lake Wohlford in 2022. To date, the District has managed HABs through the use algaecide treatments and chemical sediment sealing which have allowed normal local water deliveries to resume. The District plans to implement an oxygenation pilot study during calendar year 2027 to determine if this technology is a long-term solution to mitigate HABs in Lake Henshaw.

6.10.4 Groundwater

Groundwater is pumped from the Warner Ranch wellfield through a series of open channels and siphons to Lake Henshaw, where it becomes part of the surface water supply. Like surface water, the groundwater quality in the Warner Basin has the potential of being affected by urbanization in the watershed, agriculture and recreation. In December of 2021, the District's Watershed Sanitary Survey identified several activities, including, but not limited to, highway run-off, agricultural operations and recreation, that have the potential to adversely impact the groundwater quality in the Warner Basin.

6.10.5 Recycled Water

Water quality, as it pertains to high salinity supplies, is a significant implementation issue for recycled water projects. High TDS source water poses a special problem for water recycling facilities because conventional treatment processes are designed to remove suspended particles but not dissolved particles. TDS removal, or demineralization, requires an advanced treatment process, which can increase project costs significantly.

Residential use of water typically adds 200 to 300 mg/l of TDS to the wastewater stream. Self-regenerating water softeners can add another pound of salt per day per unit. Infiltration of brackish groundwater into sewer lines can also cause an increase in TDS. If an area receives a water supply with TDS of more than 700 mg/l, and residents add 300 mg/l or more through normal use, the recycling facility will produce recycled water with a TDS concentration of 1,000 mg/l or higher. In general, TDS concentrations over 1,000 mg/l become problematic for

irrigation and industrial reuse customers. This problem greatly limits the potential uses and marketability of recycled water, particularly for agricultural purposes, because certain crops and nursery stock are sensitive to irrigation water with TDS levels exceeding 1,000 mg/l. The District does not provide recycled water.

6.10.6 Seawater Desalination

From July 2023 to June 2024, feedwater salinity for the Carlsbad Desalination Plant had a TDS concentration average of approximately 34,000 mg/L and ranged from 23,000 to 38,000 mg/L. To address TDS concentrations at these high levels, the desalination facility uses a reverse osmosis (RO) membrane treatment process to reduce TDS to less than 350 mg/L , resulting in approximately 99 percent removal of TDS and a water supply that meets drinking water standards. Desalinated water from the Carlsbad Desalination Plant is blended with other Water Authority treated water supplies at the Twin Oaks Valley WTP. TDS concentration in the blend water will vary seasonally depending on imported water blends from Metropolitan (i.e., the blended percent of SWP vs. CRA water).

Most other agencies who purchase treated water from the Water Authority can receive some percentage of desalinated water except for connections north of the Valley Center Pipeline on the First Aqueduct and connections north of the Metropolitan connection point on the Second Aqueduct. The blend of desalinated water depends on system operations and water demands, and can vary throughout the day, month, or seasonally.

Prior to the reverse osmosis process, feedwater from the Pacific Ocean is pretreated to remove suspended solids, including organic material. The reverse osmosis process then removes dissolved solids. Next, product water is post-treated to prevent corrosion in the distribution system and improve the aesthetic quality of the water. This process generally involves adding alkalinity to the treated water. The final step, a disinfection process, provides a disinfection residual in the treated water.

A single-pass reverse osmosis process of seawater generally results in about 50 percent recovery of treated water. The remaining 50% is discharged as concentrate, with about twice the salinity of the original feedwater. The concentrate is diluted to avoid negative impacts to the marine environment from the elevated salinity levels prior to discharge.

This Page Intentionally Left Blank

CHAPTER 7 WATER SUPPLY RELIABILITY

The UWMP Act requires that an urban water supplier include, as part of its plan, an assessment of the reliability of its water supply. The assessment must compare the total projected water use with the expected supply over the next 20 years or 25 years in five-year increments. The reliability assessment is required for normal, single-dry and multiple-dry water years. The 2025 Plan projects reliability for the next 25 years. This section presents a summary of water supplies and demands within the District's service area as well as an assessment of water supply reliability.

7.1 CONSTRAINTS ON WATER SOURCES

The UWMP Act requires that every urban water supplier include, as part of its plan, an assessment of the reliability of its water supply and the vulnerability of the supply to seasonal or climatic shortages. The UWMP Act also requires that for any water source that may not be available at a consistent level of use, given specific legal, environmental or water quality factors, the agency must describe, to the extent practicable, plans to replace that source with alternative sources or water demand management measures.

As described in Sections 6.2 and 6.3 local water production is developed from both groundwater and surface water sources, which are managed conjunctively to minimize the need for imported water supplies. The production available from this system is highly variable and is dependent on hydrologic conditions within the 200 square mile watershed of the upper San Luis Rey River. This local supply variability is influenced by many factors, including climactic conditions such as El Nino, the Pacific Decadal Oscillation and jet stream variations.

As described in Section 6.10.3, HABs in Lake Henshaw have limited availability of local water. HABs occurrence is influenced by many factors, including nutrient availability and water temperature. The District and City of Escondido have developed plans to manage and mitigate for HABs in the local water system, the long-term effectiveness of those plans is still unknown. Hence, HABs must be considered as a possible constraint on the future availability of local water production.

Further, the reliability of local water is subject to the integrity of the transmission infrastructure necessary to deliver it to the District's service area. After release from Henshaw Dam, local water travels in the streambed of the San Luis Rey River for about 10 miles where it is diverted into the Escondido Canal. This structure, originally built in the 1890's and expanded in the 1920's, extends about 14 miles along the remote contours of steeply sloped hillsides with limited accessibility. At the end of the Escondido Canal, local water is delivered to Lake Wohlford. Water is released from Lake Wohlford through the Bear Valley power plant and several miles of pipeline before it is pumped to the headworks of the City of Escondido-Vista WTP. Water treated here is released into the 11 mile long Vista Flume for delivery to the District's service area.

The Escondido Canal is the most vulnerable link of this transmission system. In October 2003, the Paradise Fire burned 80 percent of the canal alignment, denuding slopes adjacent to it. The winters of 2004 and 2005 produced considerable siltation and erosion along the canal, with the result that significantly reduced local water deliveries were made despite the abundant availability of local water in 2005.

As described in Section 6.3, while the Settlement Agreement has secured the District's right to the continued production of local water; the terms of the Settlement Agreement make less local water available to the District in dry years. The Settlement Agreement also diminishes the District's independence of action to address certain matters, like HABs, in Lake Henshaw. While the Settlement Agreement removes the legal uncertainty previously attached to local water, it degrades the reliability of that supply for the future.

While the Settlement Agreement may reduce the reliability of local water, it enhances the reliability of imported water for the District (see Section 6.1.6). Under the terms of the Settlement Agreement, Reclamation will cause an estimated 7,900 AF/YR of Supplemental Water to be delivered from the Colorado River to the District, this water having third priority for allocations from the Colorado River, above the priority for both Metropolitan (fourth priority) and the Water Authority (fifth priority). Hence, the Supplemental Water portion of the District's imported water portfolio may be relatively immune from a shortage declaration on the Colorado River, but the enhanced reliability of Supplemental Water may only be meaningful to the District if the Governor of California exercises emergency powers to mandate across-the-board reductions in water deliveries by the State's retail water purveyors.

To the extent that local water and Supplemental Water supplies are insufficient to meet its total water needs for any given year, the District relies on Water Authority supplies to make up the difference. Based on information contained in the Water Authority's 2025 Plan, it is anticipated that the Water Authority will be able to meet the District's increased demands during a single-dry water year and multiple-dry water year scenarios. Summary information regarding the reliability and vulnerability of the Water Authority's and Metropolitan's water supplies is contained Section 6.1, and more detailed information can be found in each agency's 2025 plan.

Table 7-1 shows the basis of water year assessment for single-dry and multiple-dry year supplies expected to be available compared to those supplies in an average year. "Average Year" hydrology, as used in this 2025 Plan, was taken as calendar year 2020. This information serves as the basis for the normal water year assessment, single dry water year assessment and consecutive dry year assessment.

Table 7-1: Basis of Water Year Data			
Year Type	**Base Year** *If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2019-2020, use 2020*	**Available Supplies if Year Type Repeats**	
		☐	Quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP.
		☑	Quantification of available supplies is provided in this table as either volume only, percent only, or both.
		Volume Available	**% of Average Supply**
Average Year	2020		100%
Single-Dry Year	2025		110%
Consecutive Dry Years 1st Year	2026		110%
Consecutive Dry Years 2nd Year	2027		110%
Consecutive Dry Years 3rd Year	2028		110%
Consecutive Dry Years 4th Year	2029		110%
Consecutive Dry Years 5th Year	2030		110%
NOTES: None			

7.2 NORMAL WATER YEAR ASSESSMENT

If Water Authority, Metropolitan and District supplies are developed as planned and UWUO conservation targets are achieved, no shortages are anticipated within the District's service area in a normal year through 2050. Table 7-2 shows a normal assessment year's supply and demand comparison. Note that supply totals do not exceed demand totals because the District will only order as much imported water from its wholesaler – the Water Authority – that it requires to meet its demands. The District does not have reservoir volume available to store significant amounts of potable water on an annual basis.

Table 7-2: Normal Year Supply and Demand Comparison					
	2030	2035	2040	2045	2050
Supply totals *(from Table 6-9)*	16,250	16,469	16,706	16,796	16,886
Demand totals *(from Table 4-3)*	16,250	16,469	16,706	16,796	16,886
Difference	0	0	0	0	0

7.3 DRY WATER YEAR ASSESSMENT

In addition to a normal year assessment, the Act requires an assessment to compare supply and demand under single-dry year and multiple-dry water years of the next 20 or 25 years in five-year increments. Table 7-3 shows the single dry-year assessment. The projections are based on the District's local supply available in 2025 and information provided by the Water Authority and Metropolitan. The Water Authority's existing and planned supplies from the IID transfer, canal lining projects and seawater desalination projects are considered "drought resilient" supplies as discussed in Section 4 of its 2025 Plan.

As discussed in Section 4.7, the District projects that hot and dry weather (absent mandatory water use restrictions) may generate 10 percent greater demands than during normal years, as demonstrated by the impacts on demands during FY 2018. This percentage was utilized to calculate single-dry and multiple-dry year demands shown in Tables 7-3 and 7-4, respectively.

If Metropolitan, the Water Authority and the District's water supplies are maintained and developed as planned, along with achievement of the UWUO target, no shortages are anticipated within the Water Authority's service area in a single dry-year through 2050. The District will use local water resources whenever possible; however, if there is a shortfall, the District will rely on the Water Authority supplies or supplies via the Water Authority.

Table 7-3: Single Dry Year Supply and Demand Comparison

	2030	2035	2040	2045	2050
Supply totals	17,875	18,116	18,377	18,476	18,575
Demand totals	17,875	18,116	18,377	18,476	18,575
Difference	0	0	0	0	0

In accordance with the Act, Table 7-4 illustrates multiple-dry water year assessments in five-year increments. The District surface water projections were modeled as part of the District's study to replace the Vista Flume. The Water Authority supplies consist of the yield from the IID transfer, canal lining projects and Carlsbad Seawater Desalination project as well as imported water from Metropolitan.

If Metropolitan, the Water Authority and the District's water supplies are maintained and developed as planned, along with achievement of UWUO conservation target, no shortages are anticipated within the Water Authority's service area in multiple dry-year events through 2050. The District will use local water resources and Supplemental Water provided by Reclamation whenever possible; however, if there is a shortfall, the District will rely on the Water Authority supplies.

Table 7-4: Multiple Dry Years Supply and Demand Comparison						
		2030	2035	2040	2045	2050
First year	Supply totals	17,875	18,116	18,377	18,476	18,575
	Demand totals	17,875	18,116	18,377	18,476	18,575
	Difference	0	0	0	0	
Second year	Supply totals	17,923	18,168	18,396	18,495	
	Demand totals	17,923	18,168	18,396	18,495	
	Difference	0	0	0	0	
Third year	Supply totals	17,971	18,220	18,416	18,515	
	Demand totals	17,971	18,220	18,416	18,515	
	Difference	0	0	0	0	
Fourth year	Supply totals	18,018	18,272	18,436	18,535	
	Demand totals	18,018	18,272	18,436	18,535	
	Difference	0	0	0	0	
Fifth year	Supply totals	18,066	18,324	18,456	18,555	
	Demand totals	18,066	18,324	18,456	18,555	
	Difference	0	0	0	0	

7.4 DROUGHT RISK ASSESSMENT

The UWMP Act requires that every urban water supplier include, as part of its PLAN, a DRA for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the UWMP. Water Code Section 10612 requires that the DRA evaluation be based on the five driest consecutive years on record. In addition, Water Code Section 10635 requires that the analysis include consideration for plausible changes in climate, regulations, and other locally applicable criteria.

As discussed in Section 4.7, the District projects that drought weather (absent mandatory water use restrictions) may generate 10 percent greater demands than during normal years, as demonstrated by the impacts on demands during FY 2018. This percentage was utilized to calculate the gross water use shown in Table 7-5 for years 2026 through 2030.

The District's water supply portfolio consists of three sources, local water, Supplemental Water furnished by Reclamation, and water procured by the Water Authority. The reliability of local water is considered low – as discussed in Section 7.1, it is subject to many constraints, including hydrologic variability, wildland fire vulnerability, HABs and infrastructure limitations. Historically, local water production has been highly variable. Supplemental Water is considered highly reliable. As described in Section 6.1.5, Supplemental Water is furnished by

Reclamation for the benefit of the Settlement Parties, and it enjoys a high priority for allocation from the Colorado River. It is subject to the infrastructure vulnerabilities of the CRA system and the conveyance facilities of both Metropolitan and the Water Authority, but these systems have been historically reliable. Finally, the Water Authorities' water supply is also considered highly reliable. It consists of a diverse portfolio of drought tolerant supplies and with multiple contingencies to offset system vulnerabilities.

This DRA will use the five driest consecutive years of local supply historically available combined with the Water Authority's assessment of imported supplies available during a five-year drought. The historical period used in the analysis to represent the five driest consecutive year period for local water are years 2014 through 2018. Section 9.6 of the Water Authority's 2025 Plan shows that the Water Authority anticipates a remaining surplus supply for years 2026 through 2030 in its 2030 DRA.

If this DRA were to anticipate a water supply shortage, the District would anticipate utilizing actions outlined in its WSRP (also referenced as the WSCP) in Chapter 8 to reduce demands to remedy the shortfall. These actions include increasing its water supply response level to meet the shortfall, prohibitions and penalties for certain consumptions, and emergency price tiering.

The results of this DRA are shown in Table 7-5 below. Based on the analysis shown in Table 7-5, the District projects having sufficient water supplies available to meet gross water demands in all five years and therefore, actions under the WSRP are not required.

Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)	
2026	**Total**
Gross Water Use	18,509
Total Supplies	18,509
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0.0%
2027	**Total**
Gross Water Use [Use Worksheet]	18,509
Total Supplies [Supply Worksheet]	18,509
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0.0%
2028	**Total**
Gross Water Use [Use Worksheet]	18,849
Total Supplies [Supply Worksheet]	18,849
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0.0%
2029	**Total**
Gross Water Use [Use Worksheet]	19,358
Total Supplies [Supply Worksheet]	19,358
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0.0%

Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b) (Cont.)

2030	Total
Gross Water Use [Use Worksheet]	19,698
Total Supplies [Supply Worksheet]	19,698
Surplus/Shortfall w/o WSCP Action	0
Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit	0
WSCP - use reduction savings benefit	0
Revised Surplus/(shortfall)	0
Resulting % Use Reduction from WSCP action	0.0%

CHAPTER 8 WATER SHORTAGE CONTINGENCY PLANNING

The UWMP Act requires that urban water suppliers conduct a water supply reliability analysis and update existing water shortage contingency plans to include new statutory requirements as part of their 2025 Plan. This section contains the District's analysis, which is based on its WSRP (Appendix D) and Emergency Response Plan (ERP).

Additionally, this section includes a discussion on specific actions the District will take to address supply shortages due to a catastrophe, drought, or other situations. As the District relies on the Water Authority for water supplies, this section also highlights elements of the Water Authority's WSCP, including actions to be taken in response to various water shortage levels and the Water Authority's process to perform an annual water supply and demand assessment.

8.1 WATER SUPPLY RELIABILITY ANALYSIS

The District's updated Potable Water Master Plan (April 2018) provides a comprehensive review of the District's potable water supply and distribution system and includes a structured program that identifies system improvements necessary to meet existing and future demand conditions. The District's internal water supply reliability analysis is guided by a thorough condition assessment of existing facilities and a calibrated hydraulic model that accurately reflects the current distribution system demands and operating parameters.

However, as a secondary system, the District primarily relies on regional water wholesalers, Metropolitan and the Water Authority, for annual and long-term water supply planning and demand assessments. The Water Authority creates and updates a variety of long-term planning documents by coordinating with other agencies, including the District, to estimate future water demands and identify necessary facilities and supplies to meet these demands. Water Authority planning efforts are designed to address member agency needs, regulatory requirements, environmental goals, regional emergencies, and other factors. The Water Authority, in cooperation with the District and other local water suppliers, relies on the following planning documents:

- Aqueduct Operating Plan
- Business Plan
- Climate Action Plan
- Emergency Preparedness Plan
- Integrated Regional Water Management Plan
- Long-Range Financing Plan
- Model Drought Ordinance
- Regional Water Facilities Master Plan
- Water Shortage Contingency Plan
- Urban Water Management Plan

The District works with the Water Authority to determine supply availability and plans accordingly. In the event of a water shortage, the Water Authority and the District will implement measures identified in each agency's WSCP.

8.2 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

The District maintains capacity rights from two sources; local raw water treated at the Escondido-Vista WTP located at Lake Dixon and purchased water from multiple treated water connections along the Water Authority's aqueducts. The District utilizes local water resources whenever possible; however, if there is a shortfall, the District relies on Water Authority supplies.

The District's local water production is developed from both groundwater and surface water sources, which are managed conjunctively to minimize the need for imported water supplies. The District's local water supply reliability is highly variable and influenced by many factors, including climactic conditions and the integrity of the transmission infrastructure necessary to deliver it to the District's service area.

As described in Section 6.3, while the Settlement Agreement has secured the District's right to the continued production of local water, the terms of the Settlement Agreement make less local water available to the District in dry years.

As detailed in Section 7, when local water supplies are insufficient to meet the District's total water needs for any given year, the District relies on Water Authority supplies to make up the difference. Based on information contained in the Water Authority's 2025 Plan, it is anticipated that the Water Authority will be able to meet the District's increased demands during a single-dry water year and multiple-dry water year scenarios. Water Authority, Metropolitan and the District have developed sufficient supplies, no shortages are anticipated within the District's service area in a normal year through 2050.

As discussed in Section 4.7, the District projects that drought conditions (absent mandatory water use restrictions) may generate 10 percent greater demands than during normal years. In the event the DRA were to anticipate a water supply shortage, the District would anticipate utilizing actions outlined in its WSRP to reduce demands to remedy the shortfall. These actions include increasing its water supply response level to meet the shortfall and implementing prohibitions and penalties on certain consumptive uses and emergency price tiering. However, based on the DRA, the District projects having sufficient water supplies available to meet gross water demands during five consecutive dry years.

8.2.1 Water Authority Water Shortage and Drought Response Plan

In 2006, the Water Authority Board of Directors adopted the Water Shortage and Drought Response Plan (WSDRP) to serve as a comprehensive plan if the region faced supply shortages due to drought or other water shortage conditions. To ensure that the Water Authority and its

member agencies continued to proactively plan for future water supply shortages in a manner consistent with anticipated legislation, the Water Authority revised its WSDRP and renamed it the Water Shortage Contingency Plan (Water Authority WSCP) in 2017. The revisions were consistent with the long-term framework contained in DWR's *Making Water Conservation a California Way of Life*, Implementing Executive Order B-37-16, and with the provisions later codified in the Water Code in 2018 through the passage of SB 606 and AB 1668.

During the 2021-2023 drought, the SWRCB adopted an emergency regulation that required local water suppliers to implement conservation actions under Level 2 of their WSCPs. Since the San Diego region was not experiencing a water supply shortage, the Water Authority implemented its Level 2 actions, consistent with the regulation, but did not formally activate Level 2 of its WSCP. Level 2 actions included continued voluntary water use efficiency measures and use of the WSCP's communication plan. To avoid future variations between State mandates and the Water Authority's drought actions, the Water Authority implemented changes to the WSCP's shortage supply matrix. The shortage supply matrix outlines potential drought actions available to the Water Authority to utilize at each regional shortage level. The shortage supply matrix was updated in the 2025 WSCP to allow for more flexibility in the process for selecting shortage levels and allow for drought response actions to be tailored to local conditions rather than statewide mandates.

The Water Authority re-evaluates its WSCP at least every five years. Re-evaluations are performed in coordination with its member agencies, including the District, to provide a balanced, flexible, systematic approach to identifying regional actions necessary to reduce the impacts from shortages. It includes all aspects of drought planning, from steps to avoid rationing, to drought response stages, allocation methodology, pricing, tracking actual reductions in water use, and a communication strategy. Multiple actions are identified to manage shortage situations, including both supply augmentation measures and demand reductions up to 50 percent in water supply. Extraordinary conservation savings is an essential component of meeting the need for water in a time when available supplies are limited.

The Water Authority WSCP is organized into six levels. The six levels and percent reductions are consistent with the six levels required under SB 606. Potential Response Level Triggers contained in the Water Authority's WSCP are summarized in Table 8-1.

TABLE 8-1: WATER AUTHORITY POTENTIAL RESPONSE LEVEL TRIGGERS	
Regional Water Shortage Response – M&I Demand Reduction Level	**Scenarios (As Documented in Water Authority Reliability Analysis)**
Level 1 – Up to 10%	• On-going water use efficiency • Communications plan • Storage withdrawal
Level 2 – Up to 20%	• Water Authority core supplies are not adequate to meet member agency demands • Supply augmentation (i.e. carryover storage reserves and/or dry-year transfers) • Additional demand reduction measures are needed to reduce demands below the level of available supplies (i.e. guidelines on irrigation schedules or restrictions on outdoor washing activities) • Implement M&I supply allocations
Level 3 – Up to 30%	• ESP storage reserves may be utilized at the Board of Directors' discretion when the regional level of service drops below 75%
Level 4- Up to 40%	• Extraordinary demand reduction measures are needed to reduce demands below the level of available supplies (i.e. banning the use of potable water for landscape irrigation or vehicle washing)
Level 5 – Up to 50%	
Level 6 – Above 50%	
Catastrophic Emergency	• Occurs when a disaster, such as an earthquake or other emergency event, results in insufficient available water to meet the region's needs to eliminates access to imported water supplies

The District's WSRP (Appendix D) contains levels and corresponding actions that will assist the District in meeting conservation targets. Specific water conservation measures implemented during each level are described in Table 8.3.

8.2.2 Water Authority Allocation Methodology

In the event of mandatory water supply cutbacks from Metropolitan, the WSCP includes an M&I allocation methodology to determine how the Water Authority's available water supplies will be equitably allocated to its member agencies. The Water Authority administers the M&I allocation methodology following the procedures and policies contained in the Water Authority's Resolution Establishing Procedures and Policies for Administration of the Water Shortage Contingency Plan Water Supply Allocation Methodology. The M&I allocation methodology applies to those customers paying the M&I rate, including residential, commercial, and industrial customers. During an allocation, the actual reduction in member agency deliveries is determined through a comparison of the member agency's monthly meter reads and the allocation target for the member agency. This tracking information is provided in monthly progress reports to the Board of Directors and member agencies in a monthly staff report identifying how agency deliveries are tracking compared to their allocation target. The complete allocation methodology and resolution are located in the documentation of Water Authority supplies provided in the Water Authority's WSCP

8.3 DISTRICT WATER SHORTAGE CONTINGENCY PLAN

The District's WSRP, also referred to as the WSCP, describes six potable water supply conditions (levels) under which its customers must take specific actions to reduce quantities of water used. The six levels are shown in Table 8-2. The specific actions required under each level can be found in Sections 4 through 9 of the WSRP, included in Appendix D. e

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
2	Other Actions (describe)	Percentage	Up tp 20%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
3	Other Actions (describe)	Percentage	Up to 30%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
4	Other Actions (describe)	Percentage	Up to 40%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
5	Other Actions (describe)	Percentage	Up to 50%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
6	Other Actions (describe)	Percentage	50% of higher	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES:				

8.4 SHORTAGE RESPONSE ACTIONS

The UWMP Act requires that urban water suppliers align shortage response actions with shortage levels identified in the WSCP.

8.4.1 Demand Reduction

Water conservation is an integral part of the District's plan to meet future water demands. The District relies on a combination of water-use efficiency based efforts to meet its conservation goals. These include the active enforcement of mandatory water-use efficiency practices; a conservation-based rate structure, water-use efficiency rebates, investments in public education and outreach, and an active program to manage distribution system water loss. The District's demand management measures are outlined in detail in Chapter 9.

8.4.2 Supply Augmentation

The District has no independent plans to augment its current water supplies, which include local surface water, surplus supplemental water and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.

8.4.3 Operation Changes

During shortage conditions, operations may be affected by supply augmentation or demand reduction responses. For example, the District may temporarily alter the flow and routing of water through its system to more effectively distribute available supply across the service area, defer or expedite planned capital improvement projects, and implement improved monitoring, and/or alter groundwater pumping operations at the District's well fields.

8.4.4 Additional Mandatory Restrictions

In addition to specifying prohibitions against water waste, the District's WSRP includes methods (many of them the same as prohibitions identified in Table 8-5) for reducing water use when mandatory cutbacks are required. It is anticipated that by implementing the prohibitions and consumption reduction methods identified in the WSRP, the targeted reduction levels for each water supply response level can be achieved. Table 8-3 lists key consumption reduction methods used in each drought response level. A combination of these methods will be used to meet the higher consumption reduction levels.

TABLE 8-3: CONSUMPTION REDUCTION METHODS		
Consumption Reduction Method	Level When Method Takes Effect[1]	Projected Reduction
Water Use Restrictions (e.g. stop washing down paved surfaces, eliminate irrigation run-off, repair leaks within specified time-period)	1	0%
Residential and commercial landscape irrigation limited to established watering timeframes	1	0%
Limit residential and commercial landscape irrigation to assigned days	2	Up to 20%
Stop watering ornamental turf in public street medians	2	Up to 20%
No new potable water service; no new temporary (constructions meters) or permanent water meters	3	Up to 30%
Water allocations may be implemented for individual properties	3	Up to 30%
Commercial landscape irrigation prohibitions	4	Up to 40%
Residential landscape irrigation prohibitions	5	Up to 50%
All irrigation prohibited at General Manager's discretion	6	50% or higher

1 Level 1 of the District WSRP is mandatory to ensure water-use efficiency is practiced at all times.

8.4.5 Emergency Response Plan

The District uses its ERP, based on the Standard Emergency Management Systems (SEMS) guidelines, and, if necessary, WSRP, in responding to natural disasters and other events that interrupt potable water service to its customers.

The District ERP is consistent with provisions in the County ERP. The District ERP contains procedures for the distribution of potable water in a disaster; these procedures are consistent with guidelines prepared by the California State Office of Emergency Services.

The County ERP recommends the following: (1) the purchase of water purification equipment; (2) purchase of standby generators and auxiliary pumps; and (3) construction of emergency water conveyance and supply storage facilities. Because of the need for additional emergency water storage, the Water Authority has been constructing countywide emergency supply storage facilities. In addition, specific water-critical customers (such as hospitals, nursing facilities, and schools) have been identified. Likely potable water distribution sites have been pinpointed. Standby procurement documents have been developed for emergency bulk purchases of bottled water. Treatment stations, when operating, are inspected daily. When not in operation, treatment stations, pumping plants and storage distribution reservoirs are monitored through the District's Supervisory Control and Data Acquisition (SCADA) system with level, intrusion and other operating alarms. Computers monitor these systems 24 hours

a day, seven days a week. The District recognizes the importance of the Best Management Practices (BMP) in reducing water demand and will continue implementing conservation programs in an emergency. In addition, the District will increase media attention to the water supply situation during a shortage and will step up public water education programs, encourage property owners to apply for a landscape and interior water use survey and continue to advertise the importance of customers installing water efficient plumbing fixtures and appliances. Table 8-4 summarizes the actions that the District has taken to prepare itself for responding to various natural or man-made disasters.

TABLE 8-4: PREPARATION ACTIONS FOR CATASTROPHE

Possible Catastrophe	Summary of Actions
Regional Power Outage	Preparation of ERP and WSRP; staff training and exercises; procurement of standby generators and auxiliary pumps; identification of key water-critical customers; public agency and media contact list; alternative communication system; implementation of SCADA to monitor treatment stations, pumping plants and storage distribution reservoirs; short-term exchange and transfer agreements with neighboring water agencies and mutual assistance agreements.
Natural Disasters - Earthquake, Flood and Storms	Preparation of ERP and WSRP; staff training and exercises; procurement of standby generators and auxiliary pumps; standby procurement documents for the emergency purchase of bottled water and other equipment and supplies; identification of key water-critical customers; public agency and media contact list; alternative communication systems; implementation of SCADA to monitor treatment stations, pumping plants and storage distribution reservoirs; short-term exchange and transfer agreements with neighboring water agencies and mutual assistance agreements. Additionally, The Water Authority's Integrated Contingency Plan (ICP) and Emergency Storage Project (ESP) were developed to protect public health and safety and to prevent or limit economic damage that could occur from a severe shortage of water supplies.
Imported Water Supply Failure	Preparation of ERP and WSRP; staff training and exercises; procurement of standby generators and auxiliary pumps; identification of key water-critical customers; public agency and media contact list; implementation of SCADA to monitor treatment stations, pumping plants and storage distribution reservoirs; short-term exchange and transfer agreements with neighboring water agencies and mutual assistance agreements.
Contamination	Preparation of ERP and WSRP; staff training and exercises; procurement of standby generators and auxiliary pumps; standby procurement documents for the emergency purchase of bottled water and other equipment and supplies; identification of key water-critical customers; public agency and media contact list; alternative communication systems; implementation of SCADA to monitor treatment stations, pumping plants and storage distribution reservoirs; short-term exchange and transfer agreements with neighboring water agencies and mutual assistance agreements.
Structural Failure – Storage Facilities and Pump Stations	Preparation of ERP and WSRP; staff training and exercises; procurement of standby generators and auxiliary pumps; standby procurement documents for the emergency purchase of bottled water and other equipment and supplies; identification of key water-critical customers; public agency and media contact list; alternative communication systems; implementation of SCADA to monitor treatment stations, pumping plants and storage distribution reservoirs; short-term exchange and transfer agreements with neighboring water agencies and mutual assistance agreements.

8.4.6 Seismic Risk Assessment and Mitigation Plan

The UWMP Act requires that urban water suppliers include a seismic risk assessment and mitigation plan to assess the vulnerability of the water system and mitigate such vulnerabilities. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan (October 2017) is included as an attachment in Appendix F.

8.4.7 Shortage Response Action Effectiveness

District staff provide water supply and demand data for the General Manager's and Board of Directors' review monthly. This data provides key information for the District to manage resources to meet a range of estimated demands and adjust to changing conditions throughout the year; it is also used to measure the effectiveness of any water shortage contingency stage that may be implemented. As stages of water shortage are declared, the District will follow implementation of those stages and continue to monitor water demand levels. The Board of Directors reserves its right to undertake future actions in support of water conservation as authorized by law, including but not limited, to declaration of a water shortage emergency.

8.5 COMMUNICATION PROTOCOLS

The Act requires that urban water suppliers identify communication protocols and procedures to inform customers, the public and government entities of any current or predicted water shortages and associated response actions. The District has had a long-standing conservation and outreach program. The District uses a range of printed and electronic materials and other outreach activities to raise awareness of conservation measures available to customers. The District provides water efficiency messaging in newsletters (printed and electronic), water bill messages, on-hold recordings, announcements on the District's website homepage and articles and news releases in local publications to keep the public, constituents and elected officials up-to-date on District activities. Additionally, the District actively participates in community events to promote water-use efficiency and provides presentations to community groups.

Additionally, District staff attend the Joint Public Information and Conservation Coordinators monthly meeting hosted by the Water Authority for all member agencies. Coordinated regional messaging on water-use efficiency topics, drought declarations and demand management measures are a long-running practice between the Water Authority and its member agencies.

Communication during a supply shortage incident is critical to relay information to employees, response partners and critical customers. During a catastrophic event that interrupts potable water service to District customers, the District will follow communication procedures outlined in the District's ERP.

8.6 COMPLIANCE AND ENFORCEMENT

The District's WSRP (Exhibit D) prohibits various types of water use practices when certain water supply conditions exist. The table below list examples of prohibitions against specific water use practices during specified water supply conditions.

TABLE 8-5: MANDATORY PROHIBITIONS

Examples of Prohibitions	Level when Prohibition becomes Mandatory
Water leaving property as a result of irrigation or failure to repair known leaks	1
Spraying hard surfaces during irrigation	1
Surface irrigation during mid-day hours	1
Watering landscapes 48 hours after it rains	1
Washing down paved surfaces (except to alleviate fire or sanitation hazards)	1
Washing a vehicle with a hose without an automatic shut-off valve	1
Operation of any ornamental fountain without a circulating pump	1
Failure to repair a leak within 48 hours	1
Limit residential and commercial irrigation to assigned days	2
Limit irrigation of landscape on a construction project to established time frames	2
Restrictions on filling/re-filling pools, ornamental lakes and ponds	3
Restrictions on special water features	3
Washing vehicles except at a commercial carwash that use re-circulated water	3
Stop all commercial landscape irrigation (with specific exceptions)	4
Repair all leaks within 24 hours	4
Stop all residential landscape irrigation (with specific exceptions)	5
Stop all vehicle washing	5
Stop all landscape irrigation at General Manager's discretion	6

Any customer violating any provision of the District's WSRP receives a written warning for the first violation. Subsequent violations (within a "12-month moving year") result in penalties ranging from the assessment of water conservation fees to discontinuance of service.

Below is a summary of the actions and corresponding fees associated with violating any provision of the WSRP. It is important to note that fees and charges are adjusted periodically so the amounts shown in the table are subject to change and have been included for reference purposes only.

- First Violation – Warning
- Second Violation - $300 water conservation fee
- Third Violation - $526 water conservation fee
- Subsequent Violations - $751 water conservation fee; at the Board's discretion, installation of a flow restrictor ($396 – 1" or smaller meter; $755 – 1 ½ " and 2" meters) or discontinuance of service.

NOTE: The water conservation fees and other charges shown above are assessed for violations during the implementation of all levels of the WSRP.

8.7 LEGAL AUTHORITIES

This section describes the legal authorities that empower the District to implement and enforce its shortage response actions. The District was organized in 1923 under the Irrigation District Act. California Water Code Section 22075 gives the District the statutory authority to "[d]o any act necessary to furnish sufficient water in the district for any beneficial use," among other powers. Additionally, Article 10, Section 2 of the California Constitution declares that waters of the State are to be put to beneficial use and that waste, unreasonable use, or unreasonable method of use of water be prevented and that water be conserved for the public welfare.

The District also has authority under the California Water Code to implement supply shortage programs. (Cal. Water Code, Sections 350-359, 375-378.) For example, Section 375(a) of the Water Code provides:

> *Notwithstanding any other provision of the law, any public entity which supplies water at retail or wholesale for the benefit of persons within the service area or area of jurisdiction of the public entity may, by ordinance or resolution adopted by a majority of the members of the governing body after holding a public hearing upon notice and making appropriate findings of necessity for the adoption of a water conservation program, adopt and enforce a water conservation program to reduce the quantity of water used by those persons for the purpose of conserving the water supplies of the public entity.*

Cal. Water Code, Section 375(a). Water Code Section 375(b) also provides the authority for pricing to encourage water conservation.

> *With regard to water delivered for other than agricultural uses, the ordinance or resolution may specifically require the installation of water-saving devices that are designed to reduce water consumption. The ordinance or resolution may also encourage water conservation through rate structure design.*

The District's Board of Directors has also formalized various policies and rules to implement a WSRP to address shortage conditions. The District's WCSP provides a standardized methodology for allocating supplies during times of shortage. Below is a list of Resolutions and Ordinances formally adopted by the District Board of Directors to implement policies to promote conservation and enforce shortage response actions (most recent to oldest):

- Resolution No. 26- XX Resolution of the Board of Directors of the Vista Irrigation District Amending the District's Water Supply Response Program (June 17, 2026).
- Resolution No. 21- 29 Resolution of the Board of Directors of the Vista Irrigation District Amending the District's Water Supply Response Program (June 16, 2021).
- Resolution No. 15-21 Resolution of the Board of Directors of the Vista Irrigation District Amending the District's Water Supply Response Program (May 27, 2015).
- Resolution No. 11-19 amending the District's Drought Response Conservation Program and renaming it the Water Supply Response Program (June 1, 2011)
- Resolution No. 09-50 amending the Drought Response Conservation Program (October 7, 2009)
- Resolution No. 09-11 adopting the Drought Response Conservation Program with amendments to Section 10.0 (February 4 2009)
- Resolution No. 08-36 adopting a Drought Response Conservation Program (September 3, 2008)
- Ordinance No. 01-01 An Ordinance of the Vista Irrigation District Consolidating All Previous Conservation Related Ordinances and Resolutions and Establishing An Adjustable Block Rate Water Fee Structure (January 3, 2001)
- Ordinance No. 91-2 An Ordinance of the Vista Irrigation District Finding the Necessity for and Amending Its Water Conservation Program (July 31, 1999)
- Ordinance No. 087-1 An Ordinance of the Vista Irrigation District Finding the Necessity for and Adopting a Water Conservation Program (August 19, 1987)

8.8 FINANCIAL CONSEQUENCES OF WATER SHORTAGE CONTINGENCY PLAN

The District has taken several steps to reduce revenue and expense impacts resulting from water shortages. The District has implemented a three-tiered water rate structure to encourage water-use efficiency and conservation during normal and shortage conditions (see Section 9.2.3 for more details regarding the tiered rate structure).

The District has a Working Capital Reserve that was established to cover operating revenue and expense variances, including reduced water sales. In the event of a prolonged drought

and mandatory water use reductions, funds from this reserve could be used to help offset a severe increase in the water rate because of decreased water sales. If necessary, the District could also use funds from its Capital Improvement Reserve to stabilize rates.

Due to large fluctuations in the production of local water due to climatic change or operational conditions, the District is constantly exposed to large swings in the availability of local water and the need to purchase higher-cost water. In June 2005, the District Board created the Water Purchase Stabilization Reserve (Stabilization Reserve) to accumulate the necessary funding during wet years to help offset the financial burden sustained during dry years. In wet years when local water production is more than its historical average, the Stabilization Reserve is funded by transferring the value of the excess local water. In years when local water production is less than the historical average, a transfer of funds equal to the current cost of purchasing raw imported water would be made from the Reserve to avoid an increase in water rates.

8.9 MONITORING AND REPORTING

Under normal water supply conditions, potable water production figures are recorded daily, and totals are reported to the General Manager and staff on a weekly basis and to the Board of Directors monthly. During shortages, production figures are reported to the General Manager daily. Other data, such as reservoir levels and system pressures, is also reviewed to monitor progress in achieving required reductions. SCADA real-time data (monitor production and distribution, system pressures and reservoir levels) and individual water meter reads are all used by the District to measure water use reductions. Table 8-6 summarizes the mechanism used by the District to monitor water use reductions.

TABLE 8-6: WATER USE MONITORING MECHANISMS

Mechanism for Determining Actual Reductions	Type and Quality of Data Expected
Monitor daily production and distribution records	SCADA real-time data
Monitor system pressures – peak demand periods	SCADA real-time data
Monitor reservoir levels – peak demand periods	SCADA real-time data

8.10 WATER SHORTAGE CONTINGENCY PLAN REFINEMENT PROCEDURES

Monitoring and reporting key water use metrics is fundamental to water supply planning and management. Monitoring is also essential to ensure that the response actions are achieving their intended water use reduction purposes, or if improvements or new actions need to be considered. The District will monitor and report on implementation of its WSRP and make adjustments as necessary.

8.11 PLAN ADOPTION, SUBMITTAL AND AVAILABILITY

The District solicited and received public comments on the draft 2025 Plan. In accordance with the Act, the District held a public hearing to adopt the 2025 Plan. The District notified the public, cities and the County within its service area 60 days prior to the public hearing and made copies of the draft plan available for public review. The District Board of Directors held a public hearing on June 17, 2026 at 9:00 AM and formally adopted the 2025 Plan.

This Page Intentionally Left Blank

CHAPTER 9 DEMAND MANAGEMENT MEASURES

Water conservation is an integral part of the District's plan to meet future water demands as well as the requirements of SBX 7-7 and the "Making Conservation a California Way of Life Regulation". Included in this chapter is information on the District's DMMs as required by Water Code Section 10631.

9.1 VISTA IRRIGATION DISTRICT CONSERVATION PROGRAM

The District started its water conservation program in 1981. Early program efforts were oriented toward a long-term public information program and cooperation with the regional water conservation programs of the Water Authority. The District recognizes water conservation as a priority in its water use planning. The long-term goal of the District's water conservation program is to achieve maximum efficiency for various beneficial water uses. Specific objectives of the District's conservation policy are the elimination of wasteful or inefficient practices in water use, the continued development and dissemination of information on both current and potential water conservation practices, and the on-going implementation of conservation practices.

The District's water conservation program is based on the District doing what it is most suited to accomplish within its service area. As such, the District pursues water conservation activities that are specific and local in nature while leaving the large-scale and regional water conservation programs to the appropriate regional water purveyor.

9.2 EXISTING DEMAND MANAGEMENT MEASURES FOR RETAIL SUPPLIERS

The District relies on a combination of water-use efficiency-based efforts to meet its conservation goals. These include the active enforcement of mandatory water-use efficiency practices; a conservation-based water rate structure, water-use efficiency rebates, investments in public education and outreach, and an active program to manage distribution system real loss.

9.2.1 Water Waste Prevention Ordinances

The District adopted Ordinance No. 90-01 in 1990 that prohibited wasteful practices, such as gutter flooding, sidewalk and driveway washing, etc. The ordinance, which was updated in 2001 and 2002, was repealed and ultimately replaced by Resolution No. 15-21, also known as the WSRP (Appendix D). Non-compliance with provisions of the WSRP is enforced through a violation process, which is detailed in Section 9 of the resolution.

Since 1990, the District has issued over 1,600 warning/violation notices. Water used in violation of the WSRP may result in the assessment of a Water Conservation Fee. The District enforces water use restrictions identified in each WSRP level.

The cities of Escondido, Oceanside, San Marcos and Vista and County operate under their own water efficient landscape ordinance or under the State of California's model water landscape efficient ordinance approved on July 15, 2015.

9.2.2 Metering

The District meters all of its service connections.

9.2.3 Conservation Pricing

The District has implemented a three-tiered water rate structure to encourage water-use efficiency and conservation during normal and shortage conditions.

The District's three-tiered water rate structure is based on meter size and applied to all customer classes. The tier thresholds for each meter size are different; however, the cost per unit (748 gallons) in each tier remains the same. Table 9-1 shows the relationship between meter size and the monthly allotment in each tier as well as the current cost per unit. It is important to note that water rates are adjusted periodically so the amounts shown in the table are subject to change and have been included for reference purposes only.

TABLE 9-1: TIERED WATER RATE SCHEDULE

Meter Size	Tier 1 - $6.01/unit	Tier 2 - $7.79/unit	Tier 3 - $7.82/unit
5/8"	0-4	5-42	43+
¾" & ¾"X1"	0-6	7-60	61+
1"	0-15	16-150	151+
1 ½"	0-30	31-300	300+
2"	0-48	49-480	481+
3"	0-96	97-960	961+
4"	0-150	151-1,500	1,501+
6"	0-300	301-3,000	3,000+
8"	0-480	481-4,800	4,801+
10"	0-690	691-6,900	6,901+

9.2.4 Public Education and Outreach

The District utilizes a multi-pronged approach to public relations and community outreach. The District runs its own internal outreach and education programs and works with its water wholesalers when appropriate. Public education and outreach are integral to the District to meet its water conservation goals.

Vista Irrigation District Customer Communication

The District communicates to its customers through its website, bill messages, newsletters, news releases, annual reports and direct mailers. The District's website (www.vidwater.org) is where customers can find water saving tips, information about conservation programs, and links to regional water conservation programs. Bill messages include promotion of conservation programs and water saving tips. The District's newsletter, *Reflections*, includes water conservation information and promotes District conservation programs.

Water Awareness Calendar Contest

The District participates in the North County Water Agencies (NCWA) Water Awareness Poster Contest, which is an art and education program for fourth graders. Each member agency of the NCWA operates its own contest within its service territory. Students living in or attending school within the District's service territory are eligible to enter. In-class presentations are offered by the District as part of the contest program. Fourth graders may enter the contest by drawing a picture that is representative of the contest's theme. The theme in 2025 was "Love Water, Save Water". The contest entries are then judged by District staff who select the first, second, and third place winners. The artwork of the top three entries are then used to create a page in the following year's calendar.

WaterSmart Landscape Contest

The WaterSmart Landscape Contest (Landscape Contest) is a regional contest for homeowners. The District offers a prize of a $250 gift card to its winner. The Landscape Contest is promoted regionally; however, each agency manages its Landscape Contest individually and determines its winners. Entries are judged on six criteria: overall attractiveness, appropriate plant selection, design, appropriate maintenance and efficient methods of irrigation. The goal of the Landscape Contest is to promote water-wise landscaping by providing local examples. Contest winners are featured on the Landscape Contest's website at www.landscapecontest.com.

Scholarship Contest

The District holds an annual scholarship contest for high school seniors that live within its service area. The purpose of the scholarship program is to increase student knowledge and awareness of water related issues affecting the District and its customers. Students who compete for a scholarship must complete an essay related to a water-use efficiency topic. Winners of the scholarship contest are recognized at a Board meeting and local high school graduation ceremonies. Additionally, a news release is sent to local publications announcing the winners.

Speaker's Bureau

The District offers a Speaker's Bureau to provide information to the public regarding a variety of topics, including water-use efficiency. Customers or groups can schedule a presentation by a District representative on topics related to the District.

WaterSmart Homeowner Landscape Training

In partnership with the Metropolitan, the District promotes a suite of homeowner landscape training programs; these include online and in person workshops. Traditionally, the District hosts one homeowner landscape training workshops per year, and partners with another agency on a second workshop. These workshops walk homeowners through the steps to achieve a WaterSmart landscape. Steps include; identification of their landscape target, creation of a plot plan, an evaluation of their site, soil analysis, landscape design, and irrigation retrofit and maintenance. For customers who want additional training, the WaterSmart Landscape Makeover Series provides homeowners with a more in depth overview and basic skills necessary for the successful conversion of a traditional turf grass yard into a WaterSmart landscape. This four-part series is promoted by the District and offered at various sites throughout the region.

Splash Lab Mobile Science Lab

The District sponsors four Splash Lab Mobile Science Lab (Splash Lab) visits to elementary schools in the District's service territory. The Splash Lab is a program developed and maintained by the San Diego County Office of Education and is available to fourth through eighth grade students for a fee. Students perform water chemistry experiments and learn about watersheds, where their water comes from and the importance of water-use efficiency.

Regional Outreach and Education Programs

In addition to its internal and partnership education and outreach programs, the District also supports region-wide outreach programs offered by its two wholesalers, Metropolitan and the Water Authority.

9.2.5 Programs to Assess and Manage Distribution System Real Loss

In 1995, the District established the Main Replacement Program, an ongoing program to replace aging water mains throughout the distribution system. The goal of the Main Replacement Program is to replace pipelines before they reach the end of their useful life and become a maintenance liability and to replace pipelines due to street realignments and/or improvements. As of June 2025, more than 43 miles of pipe have been replaced, ranging in size from 2 inches to 20 inches.

In 2020, the District created the Opportunity-Based Pipeline Condition Assessment Program (Assessment Program), to complement the Main Replacement Program. The Assessment Program will begin collecting and testing pipeline field samples when there is an opportunity from other activities (e.g., during valve replacements, leak and break response, service installations, new pipeline tie-ins, etc.). The field samples will be analyzed to assess the integrity of the pipeline. The insights gathered by the field-testing will increase the confidence level that the District is replacing the right pipeline at the right time and provide insight into whether additional investment levels in the Main Replacement Program may be warranted in the future.

In 2025, the District met its water loss reduction target from baseline required by January 1, 2028. After our water loss audit is validated each year, our management leaders, who are part of our water loss task force, meet and discuss the results to assess our water losses from year to year to ensure the District's continued compliance with its water loss target.

9.2.6 Water Conservation Program Coordination and Staffing Support

The District employs one full time Water Conservation Specialist; duties performed by the position include enforcing District water-use efficiency practices contained in the WSRP, developing and supporting water-use efficiency policy and programs, compliance with state regulations and dissemination of water-use efficiency and conservation program information to District customers.

9.2.7 Other Demand Management Measures

To assist customers with reducing their water consumption, the District offers financial incentives for residential customers to replace their older water using devices with new, more water efficient models. Additionally, customers can get rebates on new products and technologies to reduce their water consumption, such as a smart leak detector. CII customers are also eligible to receive rebates on a range of water efficient devices (e.g. commercial high-efficiency toilets, cooling tower conductivity controllers, etc.).

Both residential and CII customers are eligible for rebates to remove existing turf and replace it with water efficient landscaping. Combined, District customers removed over 150,000 square feet of turf during the five years associated with this Plan update.

Metropolitan's SocalWater$mart Rebate Program

The SocalWater$mart regional residential program offers rebates for qualifying indoor and outdoor products including high-efficiency clothes washers, premium high efficiency toilets, weather-based irrigation controllers, rotating sprinkler nozzles, rain barrels and cisterns, and soil moisture sensors. Rebates are also available for customers who remove turf grass and replace it with a sustainable landscape. Over the past five years, District customers received nearly 400 rebates including 149 for high efficiency clothes washers and 124 for weather-based controllers.

The SocalWater$mart regional CII program offers rebates to replace select older inefficient devices with water efficient devices. CII customers are also eligible for turf removal rebates. District CII customers installed over 3,000rotating nozzles using this program.

Water Use Surveys

In partnership with Metropolitan, the District offers its customers water use surveys to assist both residential and commercial customers to identify water saving opportunities specific to their site. Certified landscape irrigation auditors evaluate a site's landscape and irrigation system resulting in a list of recommendations provided to the customer to improve water efficiency, including plant alternatives and a proposed watering schedule. Residential sites may also receive an indoor evaluation that identifies inefficient water fixtures. The service is provided at no cost to the customer.

Turf Rebate Program and Large Landscape Direct Install Pilot Program

The Water Authority implemented two turf replacement programs; the Turf Replacement Program and the Large Landscape Direct Install Pilot Program. Both programs offered a monetary incentive per square foot to replace natural grass with water-wise landscaping.

9.3 IMPLEMENTATION OVER THE PAST FIVE YEARS

Refer to Section 9.2.7 for a list of the DMMs implemented over the past five years by the District.

9.4 IMPLEMENTATION TO ACHIEVE WATER USE TARGETS

As mentioned in Section 9.1, the District has a long history of including water conservation in water supply planning. The District will continue to utilize DMMs listed in Section 9.2.7 to meet its future water supply planning targets.

9.5 WATER USE OBJECTIVES

The District will align its conservation management actions under the "Making Conservation a California Way of Life" framework. This framework is incorporated within the UWUOs.

This Page Intentionally Left Blank

CHAPTER 10 – PLAN ADOPTION, SUBMITTAL AND IMPLEMENTATION

10.1 INCLUSION OF ALL 2025 DATA

The District's 2025 Plan includes water use and planning data for FY 2025. As such, the 2025 Plan was completed after the close of FY 2025 (June 30, 2025).

10.2 NOTICE OF PUBLIC HEARING

10.2.1 Notice to Cities and Counties

In accordance with the UWMP Act, the District notified cities and the County within its service area 60 days prior to the public hearing that it was preparing a 2025 Plan. Notice of the public hearing and copies of the draft 2025 Plan were made available to cities and the County. Table 10-1 lists the cities and county that received the 60-day notice as well as the notice of public hearing. Copies of the 2025 Plan preparation and public hearing notices are included in Appendix B.

TABLE 10-1: NOTIFICATION TO CITIES AND COUNTIES

City/County Name	60 Day Notice	Notice of Public Hearing
City of Vista	✔	✔
City of Escondido	✔	✔
City of San Marcos	✔	✔
City of Oceanside	✔	✔
County of San Diego	✔	✔

10.2.2 Notice to the Public

Per Water Code Section 10642, the District's draft 2025 Plan was made available for public inspection at its office. Additionally, an electronic copy of the draft 2025 Plan was made available for review on the District's website. The District published a notice of public hearing in the newspaper pursuant to the requirements set forth in Government Code Section 6066. A copy of the public hearing notice is included in Appendix B.

10.3 PUBLIC HEARING AND ADOPTION

In accordance with the UWMP Act and Government Code Section 6066, the District Board of Directors held a public hearing on June 17, 2026 at 9:00 AM and adopted the 2025 Plan following the closure of said public hearing. As stated in its public hearing notice, the District encouraged the active involvement of the diverse social, cultural, and economic elements of the population within its service area. Copies of resolution adopting the 2025 Plan and minutes from the June 17, 2026 meeting are included in Appendix B.

10.4 PLAN SUBMITTAL

Within 30 days of adoption, copies of the final 2025 Plan will be submitted to DWR electronically and a CD will be mailed to the California State Library, cities within the District's service area and the County of San Diego.

10.5 PUBLIC AVAILABILITY

Once the 2025 Plan has been submitted to DWR, it will be posted to the District's website and be made available in hardcopy at the District's office during normal business hours.

10.6 PLAN IMPLEMENTATION

The programs and policies set forth in the 2025 Plan will be implemented to assist the District in meeting conservation goals and balance available water supplies with demands.

The District plans, designs, and constructs water system facilities to meet projected ultimate demands to be placed upon the potable water system. As documented in previous plans, the District forecasts needs and plans for water supply requirements to meet projected demands at ultimate build out. The water facilities are constructed when development activities require them for adequate cost-effective water service. The District continues to implement projects identified in its Potable Water Master Plan based on system demands.

APPENDIX A

Urban Water Management Planning Act

Senate Bill 7 of the Seventh Extraordinary Session (SBX 7-7)
(Water Conservation Act of 2009)

Appendix A
California Water Code—Urban Water Management Planning

This material is for informational purposes only and is not to be used in place of official California Water Code.

This appendix presents updated sections of California Water Code (Water Code) as of the publication of this Guidebook and as compiled by California Department of Water Resources (DWR) staff. The selection here focuses on the portions of Water Code directly relevant to preparation of an Urban Water Management Plan (UWMP), and sections of Water Code that are contextually relevant to urban water suppliers and DWR.

Water Code published here also concerns the Urban Water Management Planning Act, the Water Conservation Act of 2009 (SB X7-7), which covers sustainable water use and demand reduction, and more. Further legislative information is available on the California Legislative Information website.

Contents

Water Conservation Act of 2009 (SB X7-7)

This section contains information extracted from Water Code Division 6, *Conservation, Development, and Utilization of State Water Resources*, Part 2.55, *Sustainable Water Use And Demand Reduction*. Click on any section header below to read Water Code directly at the California Legislative Information website.

Chapter 1. General Declarations and Policy, Sections 10608–10608.8

Section 10608.

The Legislature finds and declares all of the following:

(a) Water is a public resource that the California Constitution protects against waste and unreasonable use.

(b) Growing population, climate change, and the need to protect and grow California's economy while protecting and restoring our fish and wildlife habitats make it essential that the state manage its water resources as efficiently as possible.

(c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta.

(d) Reduced water use through conservation provides significant energy and environmental benefits, and can help protect water quality, improve streamflows, and reduce greenhouse gas emissions.

(e) The success of state and local water conservation programs to increase efficiency of water use is best determined on the basis of measurable outcomes related to water use or efficiency.

(f) Improvements in technology and management practices offer the potential for increasing water efficiency in California over time, providing an essential water management tool to meet the need for water for urban, agricultural, and environmental uses.

(g) The Governor has called for a 20 percent per capita reduction in urban water use statewide by 2020.

(h) The factors used to formulate water use efficiency targets can vary significantly from location to location based on factors including weather, patterns of urban and suburban development, and past efforts to enhance water use efficiency.

(i) Per capita water use is a valid measure of a water provider's efforts to reduce urban water use within its service area. However, per capita water use is less

useful for measuring relative water use efficiency between different water providers. Differences in weather, historical patterns of urban and suburban development, and density of housing in a particular location need to be considered when assessing per capita water use as a measure of efficiency.

Section 10608.4.

It is the intent of the Legislature, by the enactment of this part, to do all of the following:

(a) Require all water suppliers to increase the efficiency of use of this essential resource.

(b) Establish a framework to meet the state targets for urban water conservation identified in this part and called for by the Governor.

(c) Measure increased efficiency of urban water use on a per capita basis.

(d) Establish a method or methods for urban retail water suppliers to determine targets for achieving increased water use efficiency by the year 2020, in accordance with the Governor's goal of a 20- percent reduction.

(e) Establish consistent water use efficiency planning and implementation standards for urban water suppliers and agricultural water suppliers.

(f) Promote urban water conservation standards that are consistent with the California Urban Water Conservation Council's adopted best management practices and the requirements for demand management in Section 10631.

(g) Establish standards that recognize and provide credit to water suppliers that made substantial capital investments in urban water conservation since the drought of the early 1990s.

(h) Recognize and account for the investment of urban retail water suppliers in providing recycled water for beneficial uses.

(i) Require implementation of specified efficient water management practices for agricultural water suppliers.

(k) Support the economic productivity of California's agricultural, commercial, and industrial sectors.

(l) Advance regional water resources management.

Section 10608.8.

(a)

(1) Water use efficiency measures adopted and implemented pursuant to this part or Part 2.8 (commencing with Section 10800) are water conservation measures subject to the protections provided under Section 1011.

(2) Because an urban agency is not required to meet its urban water use target until 2020 pursuant to subdivision (b) of Section 10608.24, an urban retail water supplier's failure to meet those targets shall not establish a violation of law for purposes of any state administrative or judicial proceeding prior to January 1, 2021. Nothing in this paragraph limits the use of data reported to the department or the board in litigation or an administrative proceeding. This paragraph shall become inoperative on January 1, 2021.

(3) To the extent feasible, the department and the board shall provide for the use of water conservation reports required under this part to meet the requirements of Section 1011 for water conservation reporting.

(b) This part does not limit or otherwise affect the application of Chapter 3.5 commencing with Section 11340), Chapter 4 (commencing with Section 11370), Chapter 4.5 (commencing with Section 11400), and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

(c) This part does not require a reduction in the total water used in the agricultural or urban sectors, because other factors, including, but not limited to, changes in agricultural economics or population growth may have greater effects on water use. This part does not limit the economic productivity of California's agricultural, commercial, or industrial sectors.

(d) The requirements of this part do not apply to an agricultural water supplier that is a party to the Quantification Settlement Agreement, as defined in subdivision (a) of Section 1 of Chapter 617 of the Statutes of 2002, during the period within which the Quantification Settlement Agreement remains in effect. After the expiration of the Quantification Settlement Agreement, to the extent conservation water projects implemented as part of the Quantification Settlement Agreement remain in effect, the conserved water created as part of those projects shall be credited against the obligations of the agricultural water supplier pursuant to this part.

Chapter 2. Definitions, Section 10608.12

Section 10608.12.

Unless the context otherwise requires, the following definitions govern the construction of this part:

(a) "Affordable housing" has the same meaning as defined in Section 34191.30 of the Health and Safety Code.

(b) "Agricultural water supplier" means a water supplier, either publicly or privately owned, providing water to 10,000 or more irrigated acres, excluding recycled water. "Agricultural water supplier" includes a supplier or contractor

for water, regardless of the basis of right, that distributes or sells water for ultimate resale to customers. "Agricultural water supplier" does not include the department.

(c) "Base daily per capita water use" means any of the following:

(1) The urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous 10-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(2) For an urban retail water supplier that meets at least 10 percent of its 2008 measured retail water demand through recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier, the urban retail water supplier may extend the

(3) calculation described in paragraph (1) up to an additional five years to a maximum of a continuous 15-year period ending no earlier than December 31, 2004, and no later than December 31, 2010.

(4) For the purposes of Section 10608.22, the urban retail water supplier's estimate of its average gross water use, reported in gallons per capita per day and calculated over a continuous five-year period ending no earlier than December 31, 2007, and no later than December 31, 2010.

(d) Baseline commercial, industrial, and institutional water use" means an urban retail water supplier's base daily per capita water use for commercial, industrial, and institutional users.

(e) "CII water use" means water used by commercial water users, industrial water users, institutional water users, and large landscape water users.

(f) "Commercial water user" means a water user that provides or distributes a product or service.

(g) "Common area" means that portion of a common interest development or of a property owned or managed by a homeowners' association or a community service organization or similar entity that is not assigned or allocated to the exclusive use of the occupants of an individual dwelling unit within the property.

(h) "Common interest development" has the same meaning as in Section 4100 of the Civil Code.

(i) "Community service organization or similar entity" has the same meaning as in Section 4110 of the Civil Code.

(j) "Community space" means an area designated by a property owner or a governmental agency to accommodate human foot traffic for civic, ceremonial, or other community events or social gatherings

(k) Compliance daily per capita water use" means the gross water use during the final year of the reporting period, reported in gallons per capita per day.

(l) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(m) "Functional turf" means a ground cover surface of turf located in a recreational use area or community space. Turf enclosed by fencing or other barriers to permanently preclude human access for recreation or assembly is not functional turf.

(n) "Gross water use" means the total volume of water, whether treated or untreated, entering the distribution system of an urban retail water supplier, excluding all of the following:

(1) Recycled water that is delivered within the service area of an urban retail water supplier or its urban wholesale water supplier.

(2) The net volume of water that the urban retail water supplier places into long-term storage.

(3) The volume of water the urban retail water supplier conveys for use by another urban water supplier.

(4) The volume of water delivered for agricultural use, except as otherwise provided in subdivision (f) of Section 10608.24.

(o) "Homeowners' association" means an "association" as defined in Section 4080 of the Civil Code.

(p) "Industrial water user" means a water user that is primarily a manufacturer or processor of materials as defined by the North American Industry Classification System code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.

(q) "Institutional water user" means a water user dedicated to public service. This type of user includes, among other users, higher education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

(r) "Interim urban water use target" means the midpoint between the urban retail water supplier's base daily per capita water use and the urban retail water supplier's urban water use target for 2020.

(s) "Large landscape" means a nonresidential landscape as described in the performance measures for CII water use adopted pursuant to Section 10609.10.

(t) "Locally cost effective" means that the present value of the local benefits of implementing an agricultural efficiency water management practice is greater

than or equal to the present value of the local cost of implementing that measure.

(u) "Nonfunctional turf" means any turf that is not functional turf, and includes turf located within street rights-of-way and parking lots.

(v) "Performance measures" means actions to be taken by urban retail water suppliers that will result in increased water use efficiency by CII water users. Performance measures may include, but are not limited to, educating CII water users on best management practices, conducting water use audits, and preparing water management plans. Performance measures do not include process water.

(w) "Potable reuse" means direct potable reuse, indirect potable reuse for groundwater recharge, and reservoir water augmentation as those terms are defined in Section 13561.

(x) "Potable water" means water that is suitable for human consumption.

(y) "Process water" means water used by industrial water users for producing a product or product content or water used for research and development. Process water includes, but is not limited to, continuous manufacturing processes, and water used for testing, cleaning, and maintaining equipment. Water used to cool machinery or buildings used in the manufacturing process or necessary to maintain product quality or chemical characteristics for product manufacturing or control rooms, data centers, laboratories, clean rooms, and other industrial facility units that are integral to the manufacturing or research and development process is process water. Water used in the manufacturing process that is necessary for complying with local, state, and federal health and safety laws, and is not incidental water, is process water. Process water does not mean incidental water uses.

(z) "Public water system" has the same meaning as defined in Section 116275 of the Health and Safety Code.

(aa) "Recreational use area" means an area designated by a property owner or a governmental agency to accommodate human foot traffic for recreation, including, but not limited to, sports fields, golf courses, playgrounds, picnic grounds, or pet exercise areas. This recreation may be either formal or informal.

(ab) "Recycled water" means recycled water, as defined in subdivision (n) of Section 13050.

(ac) "Regional water resources management" means sources of supply resulting from watershed-based planning for sustainable local water reliability or any of the following alternative sources of water:

(1) The capture and reuse of stormwater or rainwater.

(2) The use of recycled water.

(3) The desalination of brackish groundwater.

(4) The conjunctive use of surface water and groundwater in a manner that is consistent with the safe yield of the groundwater basin.

(ad) "Reporting period" means the years for which an urban retail water supplier reports compliance with the urban water use targets.

(ae) "Turf" has the same meaning as defined in Section 491 of Title 23 of the California Code of Regulations

(af) "Urban retail water supplier" means a water supplier, either publicly or privately owned, that directly provides potable municipal water to more than 3,000 end users or that supplies more than 3,000 acre-feet of potable water annually at retail for municipal purposes.

(ag) "Urban water supplier" has the same meaning as defined in Section 10617.

(ah) "Urban water use objective" means an estimate of aggregate efficient water use for the previous year based on adopted water use efficiency standards and local service area characteristics for that year, as described in Section 10609.20.

(ai) "Urban water use target" means the urban retail water supplier's targeted future daily per capita water use.

(aj) "Urban wholesale water supplier" means a water supplier, either publicly or privately owned, that provides more than 3,000 acre- feet of water annually at wholesale for potable municipal purposes.

Chapter 2.5. Nonfunctional Turf

Section 10608.14.

(a) The use of potable water for the irrigation of nonfunctional turf located on commercial, industrial, and institutional properties, other than a cemetery, and on properties of homeowners' associations, common interest developments, and community service organizations or similar entities is prohibited as of the following dates:

(1) All properties owned by the Department of General Services, beginning January 1, 2027.

(2) All properties owned by local governments, local or regional public agencies, and public water systems, except those specified in paragraph (5), beginning January 1, 2027.

(3) All other institutional properties and all commercial and industrial properties, beginning January 1, 2028.

(4) All common areas of properties of homeowners' associations, common interest developments, and community service organizations or similar entities, beginning January 1, 2029.

(5) All properties owned by local governments, local public agencies, and public water systems in a disadvantaged community, beginning January 1, 2031, or the date upon which a state funding source is made available to fund conversion of nonfunctional turf on these properties to climate-appropriate landscapes, whichever is later.

(b) Notwithstanding subdivision (a), the use of potable water is not prohibited by this section to the extent necessary to ensure the health of trees and other perennial nonturf plantings, or to the extent necessary to address an immediate health and safety need.

(c) The board may, upon a showing of good cause for reasons including economic hardship, critical business need, and potential impacts to human health or safety, postpone a compliance deadline in subdivision (a) by up to three years for certain persons, institutions, and businesses, and may create a form to be used for compliance certification to the board by property owners.

(d) Public water systems shall, by no later than January 1, 2027, revise their regulations, ordinances, or policies governing water service to include the requirements of subdivisions (a) and (b), as revised by the board pursuant to subdivision (c), and shall communicate the requirements to their customers on or before that date.

(e)

(1) An owner of commercial, industrial, or institutional property with more than 5,000 square feet of irrigated area other than a cemetery shall certify to the board, commencing June 30, 2030, and every three years thereafter through 2039, that their property is in compliance with the requirements of this chapter.

(2) An owner of a property with more than 5,000 square feet of irrigated common area that is a homeowners' association, common interest development, or community service organization or similar entity shall certify to the board, commencing June 30, 2031, and every three years thereafter through 2040, that their property is in compliance with the requirements of this chapter.

(f) Noncompliance by a person or entity with this chapter or regulations adopted thereunder shall be subject to civil liability and penalties set forth in Section 1846, or to civil liability and penalties imposed by an urban retail water supplier pursuant to a locally adopted ordinance or policy.

(g)

(1) A public water system, city, county, or city and county may enforce the provisions of this chapter.

(2) To avoid duplication of enforcement, any entity identified in paragraph (1) that is not a retail public water system shall notify the retail public water system 30 days prior to enforcement of the provisions of this chapter against a property served by such system.

(3) Nothing in paragraph (2) shall preclude enforcement by any entity identified in paragraph (1) once adequate notice is given.

(h) The department shall, when using funds appropriated for water conservation for turf replacement, prioritize financial assistance for nonfunctional turf replacement to public water systems serving disadvantaged communities and to owners of affordable housing.

(i) The department shall utilize the saveourwater.com internet website and outreach campaign to provide information and resources on converting nonfunctional turf to native vegetation.

(j) The Governor's Office of Business and Economic Development shall support small and minority-owned businesses that provide services that advance compliance with this chapter.

Chapter 3. Urban Retail Water Suppliers, Sections 10608.16–10608.44

Section 10608.16.

(a) The state shall achieve a 20-percent reduction in urban per capita water use in California on or before December 31, 2020.

(1) The state shall make incremental progress towards the state target specified in subdivision (a) by reducing urban per capita water use by at least 10 percent on or before December 31, 2015.

Section 10608.20.

(a)

(1) Each urban retail water supplier shall develop urban water use targets and an interim urban water use target by July 1, 2011. Urban retail water suppliers may elect to determine and report progress toward achieving these targets on an individual or regional basis, as provided in subdivision (a) of Section 10608.28, and may determine the targets on a fiscal year or calendar year basis.

(2) It is the intent of the Legislature that the urban water use targets described in paragraph (1) cumulatively result in a 20-percent reduction from the baseline daily per capita water use by December 31, 2020.

(b) An urban retail water supplier shall adopt one of the following methods for determining its urban water use target pursuant to subdivision (a):

(1) Eighty percent of the urban retail water supplier's baseline per capita daily water use.

(2) The per capita daily water use that is estimated using the sum of the following performance standards:

(A) For indoor residential water use, 55 gallons per capita daily water use as a provisional standard. Upon completion of the department's 2017 report to the Legislature pursuant to Section 10608.42, this standard may be adjusted by the Legislature by statute.

(B) For landscape irrigated through dedicated or residential meters or connections, water efficiency equivalent to the standards of the Model Water Efficient Landscape Ordinance set forth in Chapter 2.7 (commencing with Section 490) of Division 2 of Title 23 of the California Code of Regulations, as in effect the later of the year of the landscape's installation or 1992. An urban retail water supplier using the approach specified in this subparagraph shall use satellite imagery, site visits, or other best available technology to develop an accurate estimate of landscaped areas.

(C) For commercial, industrial, and institutional uses, a 10- percent reduction in water use from the baseline commercial, industrial, and institutional water use by 2020.

(3) Ninety-five percent of the applicable state hydrologic region target, as set forth in the state's draft 20x2020 Water Conservation Plan (dated April 30, 2009). If the service area of an urban water supplier includes more than one hydrologic region, the supplier shall apportion its service area to each region based on population or area.

(4) A method that shall be identified and developed by the department, through a public process, and reported to the Legislature no later than December 31, 2010. The method developed by the department shall identify per capita targets that cumulatively result in a statewide 20-percent reduction in urban daily per capita water use by December 31, 2020. In developing urban daily per capita water use targets, the department shall do all of the following:

(A) Consider climatic differences within the state.

(B) Consider population density differences within the state.

(C) Provide flexibility to communities and regions in meeting the targets.

(D) Consider different levels of per capita water use according to plant water needs in different regions.

(E) Consider different levels of commercial, industrial, and institutional water use in different regions of the state.

(F) Avoid placing an undue hardship on communities that have implemented conservation measures or taken actions to keep per capita water use low.

(c) If the department adopts a regulation pursuant to paragraph (4) of subdivision (b) that results in a requirement that an urban retail water supplier achieve a reduction in daily per capita water use that is greater than 20 percent by December 31, 2020, an urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may limit its urban water use target to a reduction of not more than 20 percent by December 31, 2020, by adopting the method described in paragraph (1) of subdivision (b).

(d) The department shall update the method described in paragraph (4) of subdivision (b) and report to the Legislature by December 31, 2014. An urban retail water supplier that adopted the method described in paragraph (4) of subdivision (b) may adopt a new urban daily per capita water use target pursuant to this updated method.

(e) An urban retail water supplier shall include in its urban water management plan due in 2010 pursuant to Part 2.6 (commencing with Section 10610) the baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.

(f) When calculating per capita values for the purposes of this chapter, an urban retail water supplier shall determine population using federal, state, and local population reports and projections.

(g) An urban retail water supplier may update its 2020 urban water use target in its 2015 urban water management plan required pursuant to Part 2.6 (commencing with Section 10610).

(h)

(1) The department, through a public process and in consultation with the California Urban Water Conservation Council, shall develop technical methodologies and criteria for the consistent implementation of this part, including, but not limited to, both of the following:

(A) Methodologies for calculating base daily per capita water use, baseline commercial, industrial, and institutional water use, compliance daily per capita water use, gross water use, service area

population, indoor residential water use, and landscaped area water use.

(B) Criteria for adjustments pursuant to subdivisions (d) and (e) of Section 10608.24.

(2) The department shall post the methodologies and criteria developed pursuant to this subdivision on its internet website, and make written copies available, by October 1, 2010. An urban retail water supplier shall use the methods developed by the department in compliance with this part.

(h)

(1) The department shall adopt regulations for implementation of the provisions relating to process water in accordance with Section 10608.12, subdivision (e) of Section 10608.24, and subdivision (d) of Section 10608.26.

(2) The initial adoption of a regulation authorized by this subdivision is deemed to address an emergency, for purposes of Sections 11346.1 and 11349.6 of the Government Code, and the department is hereby exempted for that purpose from the requirements of subdivision (b) of Section 11346.1 of the Government Code. After the initial adoption of an emergency regulation pursuant to this subdivision, the department shall not request approval from the Office of Administrative Law to readopt the regulation as an emergency regulation pursuant to Section 11346.1 of the Government Code.

(j)

(1) An urban retail water supplier is granted an extension to July 1, 2011, for adoption of an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) due in 2010 to allow the use of technical methodologies developed by the department pursuant to paragraph (4) of subdivision (b) and subdivision (h). An urban retail water supplier that adopts an urban water management plan due in 2010 that does not use the methodologies developed by the department pursuant to subdivision (h) shall amend the plan by July 1, 2011, to comply with this part.

(2) An urban wholesale water supplier whose urban water management plan prepared pursuant to Part 2.6 (commencing with Section 10610) was due and not submitted in 2010 is granted an extension to July 1, 2011, to permit coordination between an urban wholesale water supplier and urban retail water suppliers.

Section 10608.22.

Notwithstanding the method adopted by an urban retail water supplier pursuant to Section 10608.20, an urban retail water supplier's per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use as defined in paragraph (3) of subdivision (c) of Section 10608.12. This section does not apply to an urban retail water supplier with a base daily per capita water use at or below 100 gallons per capita per day.

Section 10608.24.

(a) Each urban retail water supplier shall meet its interim urban water use target by December 31, 2015.

(b) Each urban retail water supplier shall meet its urban water use target by December 31, 2020.

(c) An urban retail water supplier's compliance daily per capita water use shall be the measure of progress toward achievement of its urban water use target.

(d)

(1) When determining compliance daily per capita water use, an urban retail water supplier may consider the following factors:

(A) Differences in evapotranspiration and rainfall in the baseline period compared to the compliance reporting period.

(B) Substantial changes to commercial or industrial water use resulting from increased business output and economic development that have occurred during the reporting period.

(C) Substantial changes to institutional water use resulting from fire suppression services or other extraordinary events, or from new or expanded operations, that have occurred during the reporting period.

(2) If the urban retail water supplier elects to adjust its estimate of compliance daily per capita water use due to one or more of the factors described in paragraph (1), it shall provide the basis for, and data supporting, the adjustment in the report required by Section 10608.40.

(e) When developing the urban water use target pursuant to Section 10608.20, an urban retail water supplier that has a substantial percentage of industrial water use in its service area may exclude process water from the calculation of gross water use to avoid a disproportionate burden on another customer sector.

(f)

(1) An urban retail water supplier that includes agricultural water use in an urban water management plan pursuant to Part 2.6 (commencing with Section 10610) may include the agricultural water use in determining

gross water use. An urban retail water supplier that includes agricultural water use in determining gross water use and develops its urban water use target pursuant to paragraph (2) of subdivision (b) of Section 10608.20 shall use a water efficient standard for agricultural irrigation of 100 percent of reference evapotranspiration multiplied by the crop coefficient for irrigated acres.

(2) An urban retail water supplier, that is also an agricultural water supplier, is not subject to the requirements of Chapter 4 (commencing with Section 10608.48), if the agricultural water use is incorporated into its urban water use target pursuant to paragraph (1).

Section 10608.26.

(a) In complying with this part, an urban retail water supplier shall conduct at least one public hearing to accomplish all of the following:

(1) Allow community input regarding the urban retail water supplier's implementation plan for complying with this part.

(2) Consider the economic impacts of the urban retail water supplier's implementation plan for complying with this part.

(3) Adopt a method, pursuant to subdivision (b) of Section 10608.20, for determining its urban water use target.

(b) In complying with this part, an urban retail water supplier may meet its urban water use target through efficiency improvements in any combination among its customer sectors. An urban retail water supplier shall avoid placing a disproportionate burden on any customer sector.

(c) For an urban retail water supplier that supplies water to a United States Department of Defense military installation, the urban retail water supplier's implementation plan for complying with this part shall consider the conservation of that military installation under federal Executive Order 13514.

(d)

(1) Any ordinance or resolution adopted by an urban retail water supplier after the effective date of this section shall not require existing customers as of the effective date of this section, to undertake changes in product formulation, operations, or equipment that would reduce process water use, but may provide technical assistance and financial incentives to those customers to implement efficiency measures for process water. This section shall not limit an ordinance or resolution adopted pursuant to a declaration of drought emergency by an urban retail water supplier.

(2) This part shall not be construed or enforced so as to interfere with the requirements of Chapter 4 (commencing with Section 113980) to Chapter 13 (commencing with Section 114380), inclusive, of Part 7 of

Division 104 of the Health and Safety Code, or any requirement or standard for the protection of public health, public safety, or worker safety established by federal, state, or local government or recommended by recognized standard setting organizations or trade associations.

Section 10608.28.

(a) An urban retail water supplier may meet its urban water use target within its retail service area, or through mutual agreement, by any of the following:

(1) Through an urban wholesale water supplier.

(2) Through a regional agency authorized to plan and implement water conservation, including, but not limited to, an agency established under the Bay Area Water Supply and Conservation Agency Act (Division 31 (commencing with Section 81300)).

(3) Through a regional water management group as defined in Section 10537.

(4) By an integrated regional water management funding area.

(5) By hydrologic region.

(6) Through other appropriate geographic scales for which computation methods have been developed by the department.

(b) A regional water management group, with the written consent of its member agencies, may undertake any or all planning, reporting, and implementation functions under this chapter for the member agencies that consent to those activities. Any data or reports shall provide information both for the regional water management group and separately for each consenting urban retail water supplier and urban wholesale water supplier.

Section 10608.32.

All costs incurred pursuant to this part by a water utility regulated by the Public Utilities Commission may be recoverable in rates subject to review and approval by the Public Utilities Commission, and may be recorded in a memorandum account and reviewed for reasonableness by the Public Utilities Commission.

Section 10608.34.

(a)

(1) On or before January 1, 2017, the department shall adopt rules for all of the following:

(A) The conduct of standardized water loss audits by urban retail water suppliers in accordance with the method adopted by the American Water Works Association in the third edition of Water Audits and Loss

Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0.

(B) The process for validating a water loss audit report prior to submitting the report to the department. For the purposes of this section, "validating" is a process whereby an urban retail water supplier uses a technical expert to confirm the basis of all data entries in the urban retail water supplier's water loss audit report and to appropriately characterize the quality of the reported data. The validation process shall follow the principles and terminology laid out by the American Water Works Association in the third edition of Water Audits and Loss Control Programs, Manual M36 and in the Free Water Audit Software, version 5.0. A validated water loss audit report shall include the name and technical qualifications of the person engaged for validation.

(C) The technical qualifications required of a person to engage in validation, as described in subparagraph (B).

(D) The certification requirements for a person selected by an urban retail water supplier to provide validation of its own water loss audit report.

(E) The method of submitting a water loss audit report to the department.

(2) The department shall update rules adopted pursuant to paragraph (1) no later than six months after the release of subsequent editions of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36. Except as provided by the department, until the department adopts updated rules pursuant to this paragraph, an urban retail water supplier may rely upon a subsequent edition of the American Water Works Association's Water Audits and Loss Control Programs, Manual M36 or the Free Water Audit Software.

(b)

(1) On or before October 1 of each year until October 1, 2023, each urban retail water supplier reporting on a calendar year basis shall submit a completed and validated water loss audit report for the previous calendar year or the previous fiscal year as prescribed by the department pursuant to subdivision (a).

(2) On or before January 1 of each year until January 1, 2024, each urban retail water supplier reporting on a fiscal year basis shall submit a completed and validated water loss audit report for the previous fiscal year as prescribed by the department pursuant to subdivision (a).

(3) On or before January 1, 2024, and on or before January 1 of each year thereafter, each urban retail water supplier shall submit a completed and

validated water loss audit report for the previous calendar year or previous fiscal year as part of the report submitted to the department pursuant to subdivision (a) of Section 10609.24 and as prescribed by the department pursuant to subdivision (a).

(4) Water loss audit reports submitted on or before October 1, 2017, may be completed and validated with assistance as described in subdivision (c).

(c) Using funds available for the 2016–17 fiscal year, the board shall contribute up to four hundred thousand dollars ($400,000) towards procuring water loss audit report validation assistance for urban retail water suppliers.

(d) Each water loss audit report submitted to the department shall be accompanied by information, in a form specified by the department, identifying steps taken in the preceding year to increase the validity of data entered into the final audit, reduce the volume of apparent losses, and reduce the volume of real losses.

(e) At least one of the following employees of an urban retail water supplier shall attest to each water loss audit report submitted to the department:

(1) The chief financial officer.

(2) The chief engineer.

(3) The general manager.

(f) The department shall deem incomplete and return to the urban retail water supplier any final water loss audit report found by the department to be incomplete, not validated, unattested, or incongruent with known characteristics of water system operations. A water supplier shall resubmit a completed water loss audit report within 90 days of an audit being returned by the department.

(g) The department shall post all validated water loss audit reports on its internet website in a manner that allows for comparisons across water suppliers. The department shall make the validated water loss audit reports available for public viewing in a timely manner after their receipt.

(h) Using available funds, the department shall provide technical assistance to guide urban retail water suppliers' water loss detection programs, including, but not limited to, metering techniques, pressure management techniques, condition-based assessment techniques for transmission and distribution pipelines, and utilization of portable and permanent water loss detection devices.

(i) No earlier than January 1, 2019, and no later than July 1, 2020, the board shall adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. In adopting these rules, the board shall employ full life-cycle cost accounting to evaluate the costs of meeting the performance standards. The board may consider establishing a minimum

allowable water loss threshold that, if reached and maintained by an urban water supplier, would exempt the urban water supplier from further water loss reduction requirements.

Section 10608.35.

(a) The department, in coordination with the board, shall conduct necessary studies and investigations and make a recommendation to the Legislature, by January 1, 2020, on the feasibility of developing and enacting water loss reporting requirements for urban wholesale water suppliers.

(b) The studies and investigations shall include an evaluation of the suitability of applying the processes and requirements of Section 10608.34 to urban wholesale water suppliers.

(c) In conducting necessary studies and investigations and developing its recommendation, the department shall solicit broad public participation from stakeholders and other interested persons.

Section 10608.36.

Urban wholesale water suppliers shall include in the urban water management plans required pursuant to Part 2.6 (commencing with Section 10610) an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part.

Section 10608.40.

Urban water retail suppliers shall report to the department on their progress in meeting their urban water use targets as part of their urban water management plans submitted pursuant to Section 10631. The data shall be reported using a standardized form developed pursuant to Section 10608.52.

Section 10608.42.

(a) The department shall review the 2015 urban water management plans and report to the Legislature by July 1, 2017, on progress towards achieving a 20-percent reduction in urban water use by December 31, 2020. The report shall include recommendations on changes to water efficiency standards or urban water use targets to achieve the 20- percent reduction and to reflect updated efficiency information and technology changes.

(b) A report to be submitted pursuant to subdivision (a) shall be submitted in compliance with Section 9795 of the Government Code.

Section 10608.43.

The department, in conjunction with the California Urban Water Conservation Council, by April 1, 2010, shall convene a representative task force consisting of academic experts, urban retail water suppliers, environmental organizations, commercial water users, industrial water users, and institutional water users to develop alternative best management practices for commercial, industrial, and institutional users and an assessment of the potential statewide water use efficiency improvement in the commercial, industrial, and institutional sectors that would result from implementation of these best management practices. The taskforce, in conjunction with the department, shall submit a report to the Legislature by April 1, 2012, that shall include a review of multiple sectors within commercial, industrial, and institutional users and that shall recommend water use efficiency standards for commercial, industrial, and institutional users among various sectors of water use. The report shall include, but not be limited to, the following:

(a) Appropriate metrics for evaluating commercial, industrial, and institutional water use.

(b) Evaluation of water demands for manufacturing processes, goods, and cooling.

(c) Evaluation of public infrastructure necessary for delivery of recycled water to the commercial, industrial, and institutional sectors.

(d) Evaluation of institutional and economic barriers to increased recycled water use within the commercial, industrial, and institutional sectors.

(e) Identification of technical feasibility and cost of the best management practices to achieve more efficient water use statewide in the commercial, industrial, and institutional sectors that is consistent with the public interest and reflects past investments in water use efficiency.

Section 10608.44.

Each state agency shall reduce water use at facilities it operates to support urban retail water suppliers in meeting the target identified in Section 10608.16.

Chapter 5. Sustainable Water Management, Section 10608.50

Section 10608.50.

(a) The department, in consultation with the board, shall promote implementation of regional water resources management practices through increased incentives and removal of barriers consistent with state and federal law. Potential changes may include, but are not limited to, all of the following:

(1) Revisions to the requirements for urban and agricultural water management plans.

(2) Revisions to the requirements for integrated regional water management plans.

(3) Revisions to the eligibility for state water management grants and loans.

(4) Revisions to state or local permitting requirements that increase water supply opportunities, but do not weaken water quality protection under state and federal law.

(5) Increased funding for research, feasibility studies, and project construction.

(6) Expanding technical and educational support for local land use and water management agencies.

(b) No later than January 1, 2011, and updated as part of the California Water Plan, the department, in consultation with the board, and with public input, shall propose new statewide targets, or review and update existing statewide targets, for regional water resources management practices, including, but not limited to, recycled water, brackish groundwater desalination, and infiltration and direct use of urban stormwater runoff.

Chapter 6. Standardized Data Collection, Section 10608.52

Section 10608.52.

(a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24 and an agricultural water supplier's compliance with implementation of efficient water management practices pursuant to subdivision (a) of Section 10608.48. The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

Chapter 7. Funding Provisions, Sections 10608.56–10608.60

Section 10608.56.

(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(b) On and after July 1, 2013, an agricultural water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(d) Notwithstanding subdivision (b), the department shall determine that an agricultural water supplier is eligible for a water grant or loan even though the supplier is not implementing all of the efficient water management practices described in Section 10608.48, if the agricultural water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for implementation of the efficient water management practices. The supplier may request grant or loan funds to implement the efficient water management practices to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan

is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

Section 10608.60.

(a) It is the intent of the Legislature that funds made available by Section 75026 of the Public Resources Code should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for grants to implement this part. In the allocation of funding, it is the intent of the Legislature that the department give consideration to disadvantaged communities to assist in implementing the requirements of this part.

(b) It is the intent of the Legislature that funds made available by Section 75041 of the Public Resources Code, should be expended, consistent with Division 43 (commencing with Section 75001) of the Public Resources Code and upon appropriation by the Legislature, for direct expenditures to implement this part.

Chapter 9. Urban Water Use Objectives and Water Use Reporting, Sections 10609–10609.38

Section 10609.

(a) The Legislature finds and declares that this chapter establishes a method to estimate the aggregate amount of water that would have been delivered the previous year by an urban retail water supplier if all that water had been used efficiently. This estimated aggregate water use is the urban retail water supplier's urban water use objective. The method is based on water use efficiency standards and local service area characteristics for that year. By comparing the amount of water actually used in the previous year with the urban water use objective, local urban water suppliers will be in a better position to help eliminate unnecessary use of water; that is, water used in excess of that needed to accomplish the intended beneficial use.

(b) The Legislature further finds and declares all of the following:

(1) This chapter establishes standards and practices for the following water uses:

(A) Indoor residential use.

(B) Outdoor residential use.

(C) CII water use.

(D) Water losses.

(E) Other unique local uses and situations that can have a material effect on an urban water supplier's total water use.

(2) This chapter further does all of the following:

(A) Establishes a method to calculate each urban water use objective.

(B) Considers recycled water quality in establishing efficient irrigation standards.

(C) Requires the department to provide or otherwise identify data regarding the unique local conditions to support the calculation of an urban water use objective.

(D) Provides for the use of alternative sources of data if alternative sources are shown to be as accurate as, or more accurate than, the data provided by the department.

(E) Requires annual reporting of the previous year's water use with the urban water use objective.

(F) Provides a bonus incentive for the amount of potable recycled water used the previous year when comparing the previous year's water use with the urban water use objective, of up to 10 percent of the urban water use objective.

(3) This chapter requires the department and the board to solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter.

(4) This chapter preserves the Legislature's authority over long- term water use efficiency target setting and ensures appropriate legislative oversight of the implementation of this chapter by doing all of the following:

(A) Requiring the Legislative Analyst to conduct a review of the implementation of this chapter, including compliance with the adopted standards and regulations, accuracy of the data, use of alternate data, and other issues the Legislative Analyst deems appropriate.

(B) Stating legislative intent that the director of the department and the chairperson of the board appear before the appropriate Senate and Assembly policy committees to report on progress in implementing this chapter.

(C) Providing one-time-only authority to the department and board to adopt water use efficiency standards, except as explicitly provided in this chapter. Authorization to update the standards shall require separate legislation.

(c) It is the intent of the Legislature that the following principles apply to the development and implementation of long-term standards and urban water use objectives:

(1) Local urban retail water suppliers should have primary responsibility for meeting standards-based water use targets, and they shall retain the flexibility to develop their water supply portfolios, design and implement water conservation strategies, educate their customers, and enforce their rules.

(2) Long-term standards and urban water use objectives should advance the state's goals to mitigate and adapt to climate change.

(3) Long-term standards and urban water use objectives should acknowledge the shade, air quality, and heat-island reduction benefits provided to communities by trees through the support of water-efficient irrigation practices that keep trees healthy.

(4) The state should identify opportunities for streamlined reporting, eliminate redundant data submissions, and incentivize open access to data collected by urban and agricultural water suppliers.

Section 10609.2.

(a) The board, in coordination with the department, shall adopt long-term standards for the efficient use of water pursuant to this chapter on or before June 30, 2022.

(b) Standards shall be adopted for all of the following:

(1) Outdoor residential water use.

(2) Outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.

(3) A volume for water loss.

(c) When adopting the standards under this section, the board shall consider the policies of this chapter and the proposed efficiency standards' effects on local wastewater management, developed and natural parklands, and urban tree health. The standards and potential effects shall be identified by May 30, 2022. The board shall allow for public comment on potential effects identified by the board under this subdivision.

(d) The long-term standards shall be set at a level designed so that the water use objectives, together with other demands excluded from the long-term standards such as CII indoor water use and CII outdoor water use not connected to a dedicated landscape meter, would exceed the statewide conservation targets required pursuant to Chapter 3 (commencing with Section 10608.16).

(e) The board, in coordination with the department, shall adopt by regulation variances recommended by the department pursuant to Section 10609.14 and guidelines and methodologies pertaining to the calculation of an urban retail water supplier's urban water use objective recommended by the department pursuant to Section 10609.16.

Section 10609.4.

(a)

(1) Until January 1, 2025, the standard for indoor residential water use shall be 55 gallons per capita daily.

(2) Beginning January 1, 2025, and until January 1, 2030, the standard for indoor residential water use shall be 47 gallons per capita daily.

(3) Beginning January 1, 2030, the standard for indoor residential water use shall be 42 gallons per capita daily.

(b)

(1) The department, in coordination with the board, shall conduct necessary studies and investigations to assess and quantify the economic benefits and impacts of the 2030 indoor residential use standard on water, wastewater, and recycled water systems and shall include saturation end-use studies. The studies and investigations shall build on the standards and potential effects identified pursuant to subdivision (c) of Section 10609.2 and shall also consider, and as appropriate incorporate, other regional and statewide studies that quantify the impacts on water, wastewater, and recycled water systems, and evaluate the long-term effects of telework. To facilitate these studies and investigations, the board may request necessary and relevant information from wastewater agencies, including monthly influent flow, actions taken to reassess treatment processes, and the impact of the implementation of this chapter on wastewater operations, maintenance, and capital investment. The department, in coordination with the board, shall summarize the findings of these studies and investigations in a report to the Legislature on or before October 1, 2028. The report shall be submitted in compliance with Section 9795 of the Government Code.

(2) If the department, in coordination with the board, determines that the 2030 indoor residential use standard is likely to unduly impact affordability of water and wastewater services, the department and the board may jointly recommend to the Legislature an alternate date on which the 2030 indoor residential use standard shall take effect. This determination shall be made using at least two years of data reflecting application of the 2025 indoor residential use standard.

(3) Based upon the studies and investigations conducted pursuant to paragraph (1), the department shall consider whether to recommend, for adoption by the board, additional variances to accommodate unique challenges related to residential indoor water use pursuant to Section 10609.2. Variance options may include, but are not limited to, stranded assets, impacts on disadvantaged communities, impacts to environmental flows, or adverse impacts to wastewater or recycled water operations.

(4) The studies, investigations, and report described in paragraph (1) shall include timely and inclusive collaboration with, and input from, a broad group of stakeholders, including, but not limited to, environmental groups, experts in indoor plumbing, water, wastewater, and recycled water agencies.

(c) An urban retail water supplier shall not be subject to enforcement pursuant to this chapter solely for failing to meet the indoor residential use standard.

Section 10609.6.

(a)

(1) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor residential use for adoption by the board in accordance with this chapter.

(2)

(A) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).

(B) The standards shall apply to irrigable lands.

(C) The standards shall include provisions for swimming pools, spas, and other water features. Ornamental water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, shall be analyzed separately from swimming pools and spas.

(b) The department shall, by January 1, 2021, provide each urban retail water supplier with data regarding the area of residential irrigable lands in a manner that can reasonably be applied to the standards adopted pursuant to this section.

(c) The department shall not recommend standards pursuant to this section until it has conducted pilot projects or studies, or some combination of the two, to ensure that the data provided to local agencies are reasonably accurate for the

data's intended uses, taking into consideration California's diverse landscapes and community characteristics.

Section 10609.8.

(a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, standards for outdoor irrigation of landscape areas with dedicated irrigation meters or other means of calculating outdoor irrigation use in connection with CII water use for adoption by the board in accordance with this chapter.

(b) The standards shall incorporate the principles of the model water efficient landscape ordinance adopted by the department pursuant to the Water Conservation in Landscaping Act (Article 10.8 (commencing with Section 65591) of Chapter 3 of Division 1 of Title 7 of the Government Code).

(c) The standards shall include an exclusion for water for commercial agricultural use meeting the definition of subdivision (b) of Section 51201 of the Government Code.

Section 10609.9.

For purposes of Sections 10609.6 and 10609.8, "principles of the model water efficient landscape ordinance" means those provisions of the model water efficient landscape ordinance applicable to the establishment or determination of the amount of water necessary to efficiently irrigate both new and existing landscapes. These provisions include, but are not limited to, all of the following:

(a) Evapotranspiration adjustment factors, as applicable.

(b) Landscape area.

(c) Maximum applied water allowance.

(d) Reference evapotranspiration.

(e) Special landscape areas, including provisions governing evapotranspiration adjustment factors for different types of water used for irrigating the landscape.

Section 10609.10.

(a) The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, performance measures for CII water use for adoption by the board in accordance with this chapter.

(b) Prior to recommending performance measures for CII water use, the department shall solicit broad public participation from stakeholders and other interested persons relating to all of the following:

(1) Recommendations for a CII water use classification system for California that address significant uses of water.

(2) Recommendations for setting minimum size thresholds for converting mixed CII meters to dedicated irrigation meters, and evaluation of, and recommendations for, technologies that could be used in lieu of requiring dedicated irrigation meters.

(3) Recommendations for CII water use best management practices, which may include, but are not limited to, water audits and water management plans for those CII customers that exceed a recommended size, volume of water use, or other threshold.

(c) Recommendations of appropriate performance measures for CII water use shall be consistent with the October 21, 2013, report to the Legislature by the Commercial, Industrial, and Institutional Task Force entitled "Water Use Best Management Practices," including the technical and financial feasibility recommendations provided in that report, and shall support the economic productivity of California's commercial, industrial, and institutional sectors.

(b)

(1) The board, in coordination with the department, shall adopt performance measures for CII water use on or before June 30, 2022.

(2) Each urban retail water supplier shall implement the performance measures adopted by the board pursuant to paragraph (1).

Section 10609.12.

The standards for water loss for urban retail water suppliers shall be the standards adopted by the board pursuant to subdivision (i) of Section 10608.34.

Section 10609.14.

(a) The department, in coordination with the board, shall conduct necessary studies and investigations and, no later than October 1, 2021, recommend for adoption by the board in accordance with this chapter appropriate variances for unique uses that can have a material effect on an urban retail water supplier's urban water use objective.

(b) Appropriate variances may include, but are not limited to, allowances for the following:

(1) Significant use of evaporative coolers.

(2) Significant populations of horses and other livestock.

(3) Significant fluctuations in seasonal populations.

(4) Significant landscaped areas irrigated with recycled water having high levels of total dissolved solids.

(5) Significant use of water for soil compaction and dust control.

(6) Significant use of water to supplement ponds and lakes to sustain wildlife.

(7) Significant use of water to irrigate vegetation for fire protection.

(8) Significant use of water for commercial or noncommercial agricultural use.

(d) The department, in recommending variances for adoption by the board, shall also recommend a threshold of significance for each recommended variance.

(e) Before including any specific variance in calculating an urban retail water supplier's water use objective, the urban retail water supplier shall request and receive approval by the board for the inclusion of that variance.

(f) The board shall post on its Internet Web site all of the following:

(1) A list of all urban retail water suppliers with approved variances.

(2) The specific variance or variances approved for each urban retail water supplier.

(3) The data supporting approval of each variance.

Section 10609.15.

To help streamline water data reporting, the department and the board shall do all of the following:

(a) Identify urban water reporting requirements shared by both agencies, and post on each agency's Internet Web site how the data is used for planning, regulatory, or other purposes.

(b) Analyze opportunities for more efficient publication of urban water reporting requirements within each agency, and analyze how each agency can integrate various data sets in a publicly accessible location, identify priority actions, and implement priority actions identified in the analysis.

(c) Make appropriate data pertaining to the urban water reporting requirements that are collected by either agency available to the public according to the principles and requirements of the Open and Transparent Water Data Act (Part 4.9 (commencing with Section 12400)).

Section 10609.16.

The department, in coordination with the board, shall conduct necessary studies and investigations and recommend, no later than October 1, 2021, guidelines and methodologies for the board to adopt that identify how an urban retail water supplier calculates its urban water use objective. The guidelines and methodologies shall address, as necessary, all of the following:

(a) Determining the irrigable lands within the urban retail water supplier's service area.

(b) Updating and revising methodologies described pursuant to subparagraph (A) of paragraph (1) of subdivision (h) of Section 10608.20, as appropriate, including methodologies for calculating the population in an urban retail water supplier's service area.

(c) Using landscape area data provided by the department or alternative data.

(d) Incorporating precipitation data and climate data into estimates of a urban retail water supplier's outdoor irrigation budget for its urban water use objective.

(e) Estimating changes in outdoor landscape area and population, and calculating the urban water use objective, for years when updated landscape imagery is not available from the department.

(f) Determining acceptable levels of accuracy for the supporting data, the urban water use objective, and compliance with the urban water use objective.

Section 10609.18.

The department and the board shall solicit broad public participation from stakeholders and other interested persons in the development of the standards and the adoption of regulations pursuant to this chapter. The board shall hold at least one public meeting before taking any action on any standard or variance recommended by the department.

Section 10609.20.

(a) Each urban retail water supplier shall calculate its urban water use objective no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use conditions for the previous calendar or fiscal year.

(c) Each urban water supplier's urban water use objective shall be composed of the sum of the following:

(1) Aggregate estimated efficient indoor residential water use.

(2) Aggregate estimated efficient outdoor residential water use.

(3) Aggregate estimated efficient outdoor irrigation of landscape areas with dedicated irrigation meters or equivalent technology in connection with CII water use.

(4) Aggregate estimated efficient water losses.

(5) Aggregate estimated water use in accordance with variances, as appropriate.

(d)

(1) An urban retail water supplier that delivers water from a groundwater basin, reservoir, or other source that is augmented by potable reuse water may adjust its urban water use objective by a bonus incentive calculated pursuant to this subdivision.

(2) The water use objective bonus incentive shall be the volume of its potable reuse delivered to residential water users and to landscape areas with dedicated irrigation meters in connection with CII water use, on an acre-foot basis.

(3) The bonus incentive pursuant to paragraph (1) shall be limited in accordance with one of the following:

(A) The bonus incentive shall not exceed 15 percent of the urban water supplier's water use objective for any potable reuse water produced at an existing facility.

(B) The bonus incentive shall not exceed 10 percent of the urban water supplier's water use objective for any potable reuse water produced at any facility that is not an existing facility.

(4) For purposes of this subdivision, "existing facility" means a facility that meets all of the following:

(A) The facility has a certified environmental impact report, mitigated negative declaration, or negative declaration on or before January 1, 2019.

(B) The facility begins producing and delivering potable reuse water on or before January 1, 2022.

(C) The facility uses microfiltration and reverse osmosis technologies to produce the potable reuse water.

(e)

(1) The calculation of the urban water use objective shall be made using landscape area and other data provided by the department and pursuant to the standards, guidelines, and methodologies adopted by the board. The department shall provide data to the urban water supplier at a level of detail sufficient to allow the urban water supplier to verify its accuracy at the parcel level.

(2) Notwithstanding paragraph (1), an urban retail water supplier may use alternative data in calculating the urban water use objective if the supplier demonstrates to the department that the alternative data are equivalent, or superior, in quality and accuracy to the data provided by the department. The department may provide technical assistance to an

urban retail water supplier in evaluating whether the alternative data are appropriate for use in calculating the supplier's urban water use objective.

Section 10609.21.

(a) For purposes of Section 10609.20, and notwithstanding paragraph (4) of subdivision (d) of Section 10609.20, "existing facility" also includes the North City Project, phase one of the Pure Water San Diego Program, for which an environmental impact report was certified on April 10, 2018.

(b) This section shall become operative on January 1, 2019.

Section 10609.22.

(a) An urban retail water supplier shall calculate its actual urban water use no later than January 1, 2024, and by January 1 every year thereafter.

(b) The calculation shall be based on the urban retail water supplier's water use for the previous calendar or fiscal year.

(c) Each urban water supplier's urban water use shall be composed of the sum of the following:

(1) Aggregate residential water use.

(2) Aggregate outdoor irrigation of landscape areas with dedicated irrigation meters in connection with CII water use.

(3) Aggregate water losses.

Section 10609.24.

(a) An urban retail water supplier shall submit a report to the department no later than January 1, 2024, and by January 1 every year thereafter. The report shall include all of the following:

(1) The urban water use objective calculated pursuant to Section 10609.20 along with relevant supporting data.

(2) The actual urban water use calculated pursuant to Section 10609.22 along with relevant supporting data.

(3) Documentation of the implementation of the performance measures for CII water use.

(4) A description of the progress made towards meeting the urban water use objective.

(5) The validated water loss audit report conducted pursuant to Section 10608.34.

(b) The department shall post the reports and information on its internet website.

(c) The board may issue an information order or conservation order to, or impose civil liability on, an entity or individual for failure to submit a report required by this section.

Section 10609.25.

As part of the first report submitted to the department by an urban retail water supplier no later than January 1, 2024, pursuant to subdivision (a) of Section 10609.24, each urban retail water supplier shall provide a narrative that describes the water demand management measures that the supplier plans to implement to achieve its urban water use objective by January 1, 2027.

Section 10609.26.

(a)

(1) On and after January 1, 2024, the board may issue informational orders pertaining to water production, water use, and water conservation to an urban retail water supplier that does not meet its urban water use objective required by this chapter. Informational orders are intended to obtain information on supplier activities, water production, and conservation efforts in order to identify technical assistance needs and assist urban water suppliers in meeting their urban water use objectives.

(2) In determining whether to issue an informational order, the board shall consider the degree to which the urban retail water supplier is not meeting its urban water use objective, information provided in the report required by Section 10609.24, and actions the urban retail water supplier has implemented or will implement in order to help meet the urban water use objective.

(3) The board shall share information received pursuant to this subdivision with the department.

(4) An urban water supplier may request technical assistance from the department. The technical assistance may, to the extent available, include guidance documents, tools, and data.

(b) On and after January 1, 2025, the board may issue a written notice to an urban retail water supplier that does not meet its urban water use objective required by this chapter. The written notice may warn the urban retail water supplier that it is not meeting its urban water use objective described in Section 10609.20 and is not making adequate progress in meeting the urban water use objective, and may request that the urban retail water supplier address areas of concern in its next annual report required by Section 10609.24. In deciding whether to issue a written notice, the board may consider whether the urban retail water supplier has received an informational order, the degree to which the urban retail water supplier is not

meeting its urban water use objective, information provided in the report required by Section 10609.24, and actions the urban retail water supplier has implemented or will implement in order to help meet its urban water use objective.

(1) On and after January 1, 2026, the board may issue a conservation order to an urban retail water supplier that does not meet its urban water use objective. A conservation order may consist of, but is not limited to, referral to the department for technical assistance, requirements for education and outreach, requirements for local enforcement, and other efforts to assist urban retail water suppliers in meeting their urban water use objective.

(2) In issuing a conservation order, the board shall identify specific deficiencies in an urban retail water supplier's progress towards meeting its urban water use objective, and identify specific actions to address the deficiencies.

(3) The board may request that the department provide an urban retail water supplier with technical assistance to support the urban retail water supplier's actions to remedy the deficiencies.

(c) A conservation order issued in accordance with this chapter may include requiring actions intended to increase water-use efficiency, but shall not curtail or otherwise limit the exercise of a water right, nor shall it require the imposition of civil liability pursuant to Section 377.

Section 10609.27.

Notwithstanding Section 10609.26, the board shall not issue an information order, written notice, or conservation order pursuant to Section 10609.26 if both of the following conditions are met:

(a) The board determines that the urban retail water supplier is not meeting its urban water use objective solely because the volume of water loss exceeds the urban retail water supplier's standard for water loss.

(b) Pursuant to Section 10608.34, the board is taking enforcement action against the urban retail water supplier for not meeting the performance standards for the volume of water losses.

Section 10609.28.

The board may issue a regulation or informational order requiring a wholesale water supplier, an urban retail water supplier, or a distributor of a public water supply, as that term is used in Section 350, to provide a monthly report relating to water production, water use, or water conservation.

Section 10609.30.

On or before January 10, 2024, the Legislative Analyst shall provide to the appropriate policy committees of both houses of the Legislature and the public a report evaluating the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. The board and the department shall provide the Legislative Analyst with the available data to complete this report.

(a) The report shall describe all of the following:

(1) The rate at which urban retail water users are complying with the standards, and factors that might facilitate or impede their compliance.

(2) The accuracy of the data and estimates being used to calculate urban water use objectives.

(3) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.

(4) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.

(5) The early indications of how implementing this chapter might impact the efficiency of statewide urban water use.

6) Recommendations, if any, for improving statewide urban water use efficiency and the standards and practices described in this chapter.

(7) Any other issues the Legislative Analyst deems appropriate.

Section 10609.32.

It is the intent of the Legislature that the chairperson of the board and the director of the department appear before the appropriate policy committees of both houses of the Legislature on or around January 1, 2026, and report on the implementation of the water use efficiency standards and water use reporting pursuant to this chapter. It is the intent of the Legislature that the topics to be covered include all of the following:

(a) The rate at which urban retail water suppliers are complying with the standards, and factors that might facilitate or impede their compliance.

(b) What enforcement actions have been taken, if any.

(c) The accuracy of the data and estimates being used to calculate urban water use objectives.

(d) Indications of the economic impacts, if any, of the implementation of this chapter on urban water suppliers and urban water users, including CII water users.

(e) The frequency of use of the bonus incentive, the volume of water associated with the bonus incentive, value to urban water suppliers of the bonus incentive, and any implications of the use of the bonus incentive on water use efficiency.

(f) An assessment of how implementing this chapter is affecting the efficiency of statewide urban water use.

Section 10609.34.

Notwithstanding Section 15300.2 of Title 14 of the California Code of Regulations, an action of the board taken under this chapter shall be deemed to be a Class 8 action, within the meaning of Section 15308 of Title 14 of the California Code of Regulations, provided that the action does not involve relaxation of existing water conservation or water use standards.

Section 10609.36.

(a) Nothing in this chapter shall be construed to determine or alter water rights. Sections 1010 and 1011 apply to water conserved through implementation of this chapter.

(b) Nothing in this chapter shall be construed to authorize the board to update or revise water use efficiency standards authorized by this chapter except as explicitly provided in this chapter. Authorization to update the standards beyond that explicitly provided in this chapter shall require separate legislation.

(c) Nothing in this chapter shall be construed to limit or otherwise affect the use of recycled water as seawater barriers for groundwater salinity management.

Section 10609.38.

The board may waive the requirements of this chapter for a period of up to five years for any urban retail water supplier whose water deliveries are significantly affected by changes in water use as a result of damage from a disaster such as an earthquake or fire. In establishing the period of a waiver, the board shall take into consideration the breadth of the damage and the time necessary for the damaged areas to recover from the disaster.

Urban Water Management Planning Act

This section contains information extracted from Water Code Division 6, *Conservation, Development, and Utilization of State Water Resources*, Part 2.6, *Urban Water Management Planning*. Click on any section header below to read Water Code directly at the California Legislative Information website.

Chapter 1. General Declaration and Policy, Sections 10610–10610.4

Section 10610.

This part shall be known and may be cited as the "Urban Water Management Planning Act."

Section 10610.2.

(a) The Legislature finds and declares all of the following:

(1) The waters of the state are a limited and renewable resource subject to ever-increasing demands.

(2) The conservation and efficient use of urban water supplies are of statewide concern; however, the planning for that use and the implementation of those plans can best be accomplished at the local level.

(3) A long-term, reliable supply of water is essential to protect the productivity of California's businesses and economic climate, and increasing long-term water conservation among Californians, improving water use efficiency within the state's communities and agricultural production, and strengthening local and regional drought planning are critical to California's resilience to drought and climate change.

(4) As part of its long-range planning activities, every urban water supplier should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple dry water years now and into the foreseeable future, and every urban water supplier should collaborate closely with local land-use authorities to ensure water demand forecasts are consistent with current land-use planning.

(5) Public health issues have been raised over a number of contaminants that have been identified in certain local and imported water supplies.

(6) Implementing effective water management strategies, including groundwater storage projects and recycled water projects, may require

specific water quality and salinity targets for meeting groundwater basins water quality objectives and promoting beneficial use of recycled water.

(7) Water quality regulations are becoming an increasingly important factor in water agencies' selection of raw water sources, treatment alternatives, and modifications to existing treatment facilities.

(8) Changes in drinking water quality standards may also impact the usefulness of water supplies and may ultimately impact supply reliability.

(9) The quality of source supplies can have a significant impact on water management strategies and supply reliability.

(b) This part is intended to provide assistance to water agencies in carrying out their long-term resource planning responsibilities to ensure adequate water supplies to meet existing and future demands for water.

Section 10610.4.

The Legislature finds and declares that it is the policy of the state as follows:

(a) The management of urban water demands and efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

(b) The management of urban water demands and efficient use of urban water supplies shall be a guiding criterion in public decisions.

(c) Urban water suppliers shall be required to develop water management plans to achieve the efficient use of available supplies and strengthen local drought planning.

Chapter 2. Definitions, Sections 10611–10618

Section 10611.

Unless the context otherwise requires, the definitions of this chapter govern the construction of this part.

Section 10611.3.

"Customer" means a purchaser of water from a water supplier who uses the water for municipal purposes, including residential, commercial, governmental, and industrial uses.

Section 10611.5.

"Demand management" means those water conservation measures, programs, and incentives that prevent the waste of water and promote the reasonable and efficient use and reuse of available supplies.

Section 10612.

"Drought risk assessment" means a method that examines water shortage risks based on the driest five-year historic sequence for the agency's water supply, as described in subdivision (b) of Section 10635.

Section 10613.

"Efficient use" means those management measures that result in the most effective use of water so as to prevent its waste or unreasonable use or unreasonable method of use.

Section 10614.

"Person" means any individual, firm, association, organization, partnership, business, trust, corporation, company, public agency, or any agency of such an entity.

Section 10615.

"Plan" means an urban water management plan prepared pursuant to this part. A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities. The components of the plan may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The plan shall address measures for residential, commercial, governmental, and industrial water demand management as set forth in Article 2 (commencing with Section 10630) of Chapter 3. In addition, a strategy and time schedule for implementation shall be included in the plan.

Section 10616.

"Public agency" means any board, commission, county, city and county, city, regional agency, district, or other public entity.

Section 10616.5.

"Recycled water" means the reclamation and reuse of wastewater for beneficial use.

Section 10617.

"Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems subject to Chapter 4 (commencing with Section 116275) of Part 12 of Division 104 of the Health and Safety Code.

Section 10617.5.

"Water shortage contingency plan" means a document that incorporates the provisions detailed in subdivision (a) of Section 10632 and is subsequently adopted by an urban water supplier pursuant to this article.

Section 10618.

"Water supply and demand assessment" means a method that looks at current year and one or more dry year supplies and demands for determining water shortage risks, as described in Section 10632.1.

Chapter 3. Urban Water Management Plans

Article 1. General Provisions, Sections 10620–10621

Section 10620.

(a) Every urban water supplier shall prepare and adopt an urban water management plan in the manner set forth in Article 3 (commencing with Section 10640).

(b) Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.

(c) An urban water supplier indirectly providing water shall not include planning elements in its water management plan as provided in Article 2 (commencing with Section 10630) that would be applicable to urban water suppliers or public agencies directly providing water, or to their customers, without the consent of those suppliers or public agencies.

(d)

(1) An urban water supplier may satisfy the requirements of this part by participation in areawide, regional, watershed, or basinwide urban water

management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved local drought resilience.

(2) Notwithstanding paragraph (1), each urban water supplier shall develop its own water shortage contingency plan, but an urban water supplier may incorporate, collaborate, and otherwise share information with other urban water suppliers or other governing entities participating in an areawide, regional, watershed, or basinwide urban water management plan, an agricultural management plan, or groundwater sustainability plan development.

(3) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

(e) The urban water supplier may prepare the plan with its own staff, by contract, or in cooperation with other governmental agencies.

(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

Section 10621.

(a) Each urban water supplier shall update its plan at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update.

(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days before the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

(c) An urban water supplier regulated by the Public Utilities Commission shall include its most recent plan and water shortage contingency plan as part of the supplier's general rate case filings.

(d) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

(e) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

(f) Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.

Article 2. Contents of Plans, Sections 10630–10634

Section 10630.

It is the intention of the Legislature, in enacting this part, to permit levels of water management planning commensurate with the numbers of customers served and the volume of water supplied, while accounting for impacts from climate change.

Section 10630.5.

Each plan shall include a simple lay description of how much water the agency has on a reliable basis, how much it needs for the foreseeable future, what the agency's strategy is for meeting its water needs, the challenges facing the agency, and any other information necessary to provide a general understanding of the agency's plan.

Section 10631.

A plan shall be adopted in accordance with this chapter that shall do all of the following:

(a) Describe the service area of the supplier, including current and projected population, climate, and other social, economic, and demographic factors affecting the supplier's water management planning. The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available. The description shall include the current and projected land uses within the existing or anticipated service area affecting the supplier's water management planning. Urban water suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land use information, including, where appropriate, land use information obtained from local or regional land use authorities, as developed pursuant to Article 5 (commencing with Section 65300) of Chapter 3 of Division 1 of Title 7 of the Government Code.

(b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a), providing supporting and related information, including all of the following:

(1) A detailed discussion of anticipated supply availability under a normal water year, single dry year, and droughts lasting at least five years, as well as more frequent and severe periods of drought, as described in the

drought risk assessment. For each source of water supply, consider any information pertinent to the reliability analysis conducted pursuant to Section 10635, including changes in supply due to climate change.

(2) When multiple sources of water supply are identified, a description of the management of each supply in correlation with the other identified supplies.

(3) For any planned sources of water supply, a description of the measures that are being undertaken to acquire and develop those water supplies.

(4) If groundwater is identified as an existing or planned source of water available to the supplier, all of the following information:

(A) The current version of any groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720), any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management for basins underlying the urban water supplier's service area.

(B) A description of any groundwater basin or basins from which the urban water supplier pumps groundwater.

(C) For basins that a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree. For a basin that has not been adjudicated, information as to whether the department has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to coordinate with groundwater sustainability agencies or groundwater management agencies listed in subdivision (c) of Section 10723 to maintain or achieve sustainable groundwater conditions in accordance with a groundwater sustainability plan or alternative adopted pursuant to Part 2.74 (commencing with Section 10720).

(D) A detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(E) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water

supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(c) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

(d)

(1) For an urban retail water supplier, quantify, to the extent records are available, past and current water use, over the same five-year increments described in subdivision (a), and projected water use, based upon information developed pursuant to subdivision (a), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following:

(A) Single-family residential.

(B) Multifamily.

(C) Commercial.

(D) Industrial.

(E) Institutional and governmental.

(F) Landscape.

(G) Sales to other agencies.

(H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof.

(I) Agricultural.

(J) Distribution system water loss.

(2) The water use projections shall be in the same five-year increments described in subdivision (a).

(3)

(A) The distribution system water loss shall be quantified for each of the five years preceding the plan update, in accordance with rules adopted pursuant to Section 10608.34.

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

(C) In the plan due July 1, 2021, and in each update thereafter, data shall be included to show whether the urban retail water supplier met

the distribution loss standards enacted by the board pursuant to Section 10608.34.

(4)

(A) Water use projections, where available, shall display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area.

(B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following:

(i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections.

(ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

(a) Provide a description of the supplier's water demand management measures. This description shall include all of the following:

(1)

(A) For an urban retail water supplier, as defined in Section 10608.12, a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years. The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures:

(i) Water waste prevention ordinances.

(ii) Metering.

(iii) Conservation pricing.

(iv) Public education and outreach.

(v) Programs to assess and manage distribution system real loss.

(vi) Water conservation program coordination and staffing support.

(vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

(2) For an urban wholesale water supplier, as defined in Section 10608.12, a narrative description of the items in clauses (ii), (iv), (vi), and (vii) of subparagraph (B) of paragraph (1), and a narrative description of its distribution system asset management and wholesale supplier assistance programs.

(f) Include a description of all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use, as established pursuant to subdivision (a) of Section 10635. The urban water supplier shall include a detailed description of expected future projects and programs that the urban water supplier may implement to increase the amount of the water supply available to the urban water supplier in normal and single-dry water years and for a period of drought lasting five consecutive water years. The description shall identify specific projects and include a description of the increase in water supply that is expected to be available from each project. The description shall include an estimate with regard to the implementation timeline for each project or program.

(g) Describe the opportunities for development of desalinated water, including, but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

(h) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five- year increments, and during various water-year types in accordance with subdivision (f). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (f).

Section 10631.1.

(a) The water use projections required by Section 10631 shall include projected water use for single-family and multifamily residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

(b) It is the intent of the Legislature that the identification of projected water use for single-family and multifamily residential housing for lower income households will assist a supplier in complying with the requirement under

Section 65589.7 of the Government Code to grant a priority for the provision of service to housing units affordable to lower income households.

Section 10631.2.

(a) In addition to the requirements of Section 10631, an urban water management plan shall include any of the following information that the urban water supplier can readily obtain:

(1) An estimate of the amount of energy used to extract or divert water supplies.

(2) An estimate of the amount of energy used to convey water supplies to the water treatment plants or distribution systems.

(3) An estimate of the amount of energy used to treat water supplies.

(4) An estimate of the amount of energy used to distribute water supplies through its distribution systems.

(5) An estimate of the amount of energy used for treated water supplies in comparison to the amount used for nontreated water supplies.

(6) An estimate of the amount of energy used to place water into or withdraw from storage.

(7) Any other energy-related information the urban water supplier deems appropriate.

(b) The department shall include in its guidance for the preparation of urban water management plans a methodology for the voluntary calculation or estimation of the energy intensity of urban water systems. The department may consider studies and calculations conducted by the Public Utilities Commission in developing the methodology.

(c) The Legislature finds and declares that energy use is only one factor in water supply planning and shall not be considered independently of other factors.

Section 10632.

(a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan that consists of each of the following elements:

(1) The analysis of water supply reliability conducted pursuant to Section 10635.

(2) The procedures used in conducting an annual water supply and demand assessment that include, at a minimum, both of the following:

(A) The written decision making process that an urban water supplier will use each year to determine its water supply reliability.

(B) The key data inputs and assessment methodology used to evaluate the urban water supplier's water supply reliability for the current year and one dry year, including all of the following:

(i) Current year unconstrained demand, considering weather, growth, and other influencing factors, such as policies to manage current supplies to meet demand objectives in future years, as applicable.

(ii) Current year available supply, considering hydrological and regulatory conditions in the current year and one dry year. The annual supply and demand assessment may consider more than one dry year solely at the discretion of the urban water supplier.

(iii) Existing infrastructure capabilities and plausible constraints.

(iv) A defined set of locally applicable evaluation criteria that are consistently relied upon for each annual water supply and demand assessment.

(v) A description and quantification of each source of water supply.

(3)

(A) Six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, and 50 percent shortages and greater than 50 percent shortage. Urban water suppliers shall define these shortage levels based on the suppliers' water supply conditions, including percentage reductions in water supply, changes in groundwater levels, changes in surface elevation or level of subsidence, or other changes in hydrological or other local conditions indicative of the water supply available for use. Shortage levels shall also apply to catastrophic interruption of water supplies, including, but not limited to, a regional power outage, an earthquake, and other potential emergency events.

(B) An urban water supplier with an existing water shortage contingency plan that uses different water shortage levels may comply with the requirement in subparagraph (A) by developing and including a cross- reference relating its existing categories to the six standard water shortage levels.

(4) Shortage response actions that align with the defined shortage levels and include, at a minimum, all of the following:

(A) Locally appropriate supply augmentation actions.

(B) Locally appropriate demand reduction actions to adequately respond to shortages.

(C) Locally appropriate operational changes.

(D) Additional, mandatory prohibitions against specific water use practices that are in addition to state- mandated prohibitions and appropriate to the local conditions.

(E) For each action, an estimate of the extent to which the gap between supplies and demand will be reduced by implementation of the action.

(5) Communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding, at a minimum, all of the following:

(A) Any current or predicted shortages as determined by the annual water supply and demand assessment described pursuant to Section 10632.1.

(B) Any shortage response actions triggered or anticipated to be triggered by the annual water supply and demand assessment described pursuant to Section 10632.1.

(C) Any other relevant communications.

(6) For an urban retail water supplier, customer compliance, enforcement, appeal, and exemption procedures for triggered shortage response actions as determined pursuant to Section 10632.2.

(7)

(A) A description of the legal authorities that empower the urban water supplier to implement and enforce its shortage response actions specified in paragraph (4) that may include, but are not limited to, statutory authorities, ordinances, resolutions, and contract provisions.

(B) A statement that an urban water supplier shall declare a water shortage emergency in accordance with Chapter 3 (commencing with Section 350) of Division 1.

(C) A statement that an urban water supplier shall coordinate with any city or county within which it provides water supply services for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

(8) A description of the financial consequences of, and responses for, drought conditions, including, but not limited to, all of the following:

(A) A description of potential revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(B) A description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions described in paragraph (4).

(C) A description of the cost of compliance with Chapter 3.3 (commencing with Section 365) of Division 1.

(9) For an urban retail water supplier, monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance and to meet state reporting requirements.

(10) Reevaluation and improvement procedures for systematically monitoring and evaluating the functionality of the water shortage contingency plan in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

(b) For purposes of developing the water shortage contingency plan pursuant to subdivision (a), an urban water supplier shall analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code.

(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city or county within which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.

Section 10632.1.

An urban water supplier shall conduct an annual water supply and demand assessment pursuant to subdivision (a) of Section 10632 and, on or before July 1 of each year, submit an annual water shortage assessment report to the department with information for anticipated shortage, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the supplier's water shortage contingency plan. An urban water supplier that relies on imported water from the State Water Project or the Bureau of Reclamation shall submit its annual water supply and demand assessment within 14 days of receiving its final allocations, or by July 1 of each year, whichever is later.

Section 10632.2.

An urban water supplier shall follow, where feasible and appropriate, the prescribed procedures and implement determined shortage response actions in its water shortage contingency plan, as identified in subdivision (a) of Section 10632, or reasonable alternative actions, provided that descriptions of the alternative actions are submitted with the annual water shortage assessment report pursuant to Section 10632.1. Nothing in this section prohibits an urban water supplier from

taking actions not specified in its water shortage contingency plan, if needed, without having to formally amend its urban water management plan or water shortage contingency plan.

Section 10632.3.

It is the intent of the Legislature that, upon proclamation by the Governor of a state of emergency under the California Emergency Services Act (Chapter 7 (commencing with Section 8550) of Division 1 of Title 2 of the Government Code) based on drought conditions, the board defer to implementation of locally adopted water shortage contingency plans to the extent practicable.

Section 10632.5.

(a) In addition to the requirements of paragraph (3) of subdivision of Section 10632, beginning January 1, 2020, the plan shall include a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities.

(b) An urban water supplier shall update the seismic risk assessment and mitigation plan when updating its urban water management plan as required by Section 10621.

(c) An urban water supplier may comply with this section by submitting, pursuant to Section 10644, a copy of the most recent adopted local hazard mitigation plan or multihazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106- 390) if the local hazard mitigation plan or multihazard mitigation plan addresses seismic risk.

Section 10633.

The plan shall provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area, and shall include all of the following:

(a) A description of the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

(b) A description of the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.

(c) A description of the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.

(d) A description and quantification of the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

(e) The projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

(f) A description of actions, including financial incentives, which may be taken to encourage the use of recycled water, and the projected results of these actions in terms of acre-feet of recycled water used per year.

(g) A plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

Section 10634.

The plan shall include information, to the extent practicable, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Article 2.5. Water Service Reliability, Section 10635

Section 10635.

(a) Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the long-term total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry water year, and a drought lasting five consecutive water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

(b) Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included

in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update. The drought risk assessment shall include each of the following:

(1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.

(2) A determination of the reliability of each source of supply under a variety of water shortage conditions. This may include a determination that a particular source of water supply is fully reliable under most, if not all, conditions.

(3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.

(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

(c) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

(d) Nothing in this article is intended to create a right or entitlement to water service or any specific level of water service.

(e) Nothing in this article is intended to change existing law concerning an urban water supplier's obligation to provide water service to its existing customers or to any potential future customers.

Article 3. Adoption and Implementation of Plans, Sections 10640–10645

Section 10640.

(a) Every urban water supplier required to prepare a plan pursuant to this part shall prepare its plan pursuant to Article 2 (commencing with Section 10630). The supplier shall likewise periodically review the plan as required by Section 10621, and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

(b) Every urban water supplier required to prepare a water shortage contingency plan shall prepare a water shortage contingency plan pursuant to Section 10632. The supplier shall likewise periodically review the water shortage contingency plan as required by paragraph (10) of subdivision (a) of

Section 10632 and any amendments or changes required as a result of that review shall be adopted pursuant to this article.

Section 10641.

An urban water supplier required to prepare a plan or a water shortage contingency plan may consult with, and obtain comments from, any public agency or state agency or any person who has special expertise with respect to water demand management methods and techniques.

Section 10642.

Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of both the plan and the water shortage contingency plan. Prior to adopting either, the urban water supplier shall make both the plan and the water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon. Prior to any of these hearings, notice of the time and place of the hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of a hearing to any city or county within which the supplier provides water supplies. Notices by a local public agency pursuant to this section shall be provided pursuant to Chapter 17.5 (commencing with Section 7290) of Division 7 of Title 1 of the Government Code. A privately owned water supplier shall provide an equivalent notice within its service area. After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing or hearings.

Section 10643.

An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

Section 10644.

(a)

(1) An urban water supplier shall submit to the department, the California State Library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State Library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

(2) The plan, or amendments to the plan, submitted to the department pursuant to paragraph (1) shall be submitted electronically and shall

include any standardized forms, tables, or displays specified by the department.

(b) If an urban water supplier revises its water shortage contingency plan, the supplier shall submit to the department a copy of its water shortage contingency plan prepared pursuant to subdivision (a) of Section 10632 no later than 30 days after adoption, in accordance with protocols for submission and using electronic reporting tools developed by the department.

(c)

(1)

(A) Notwithstanding Section 10231.5 of the Government Code, the department shall prepare and submit to the Legislature, on or before July 1, in the years ending in seven and two, a report summarizing the status of the plans and water shortage contingency plans adopted pursuant to this part. The report prepared by the department shall identify the exemplary elements of the individual plans and water shortage contingency plans. The department shall provide a copy of the report to each urban water supplier that has submitted its plan and water shortage contingency plan to the department. The department shall also prepare reports and provide data for any legislative hearings designed to consider the effectiveness of plans and water shortage contingency plans submitted pursuant to this part.

(B) The department shall prepare and submit to the board, on or before September 30 of each year, a report summarizing the submitted water supply and demand assessment results along with appropriate reported water shortage conditions and the regional and statewide analysis of water supply conditions developed by the department. As part of the report, the department shall provide a summary and, as appropriate, urban water supplier specific information regarding various shortage response actions implemented as a result of annual supplier-specific water supply and demand assessments performed pursuant to Section 10632.1.

(C) The department shall submit the report to the Legislature for the 2015 plans by July 1, 2017, and the report to the Legislature for the 2020 plans and water shortage contingency plans by July 1, 2022.

(2) A report to be submitted pursuant to subparagraph (A) of paragraph (1) shall be submitted in compliance with Section 9795 of the Government Code.

(d) The department shall make available to the public the standard the department will use to identify exemplary water demand management measures.

Section 10645.

(a) Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

(b) Not later than 30 days after filing a copy of its water shortage contingency plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

Chapter 4. Miscellaneous Provisions, Sections 10650–10657

Section 10650.

Any actions or proceedings, other than actions by the board, to attack, review, set aside, void, or annul the acts or decisions of an urban water supplier on the grounds of noncompliance with this part shall be commenced as follows:

(a) An action or proceeding alleging failure to adopt a plan or a water shortage contingency plan shall be commenced within 18 months after that adoption is required by this part.

(b) Any action or proceeding alleging that a plan or water shortage contingency plan, or action taken pursuant to either, does not comply with this part shall be commenced within 90 days after filing of the plan or water shortage contingency plan or an amendment to either pursuant to Section 10644 or the taking of that action.

Section 10651.

In any action or proceeding to attack, review, set aside, void, or annul a plan or a water shortage contingency plan, or an action taken pursuant to either by an urban water supplier on the grounds of noncompliance with this part, the inquiry shall extend only to whether there was a prejudicial abuse of discretion. Abuse of discretion is established if the supplier has not proceeded in a manner required by law or if the action by the water supplier is not supported by substantial evidence.

Section 10652.

The California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) does not apply to the preparation and adoption of plans pursuant to this part or to the implementation of actions taken pursuant to Section 10632. Nothing in this part shall be interpreted as exempting from the California Environmental Quality Act any project that would significantly affect water supplies for fish and wildlife, or any project for implementation of the

plan, other than projects implementing Section 10632, or any project for expanded or additional water supplies.

Section 10653.

The adoption of a plan shall satisfy any requirements of state law, regulation, or order, including those of the board and the Public Utilities Commission, for the preparation of water management plans, water shortage contingency plans, or conservation plans; provided, that if the board or the Public Utilities Commission requires additional information concerning water conservation, drought response measures, or financial conditions to implement its existing authority, nothing in this part shall be deemed to limit the board or the commission in obtaining that information. The requirements of this part shall be satisfied by any urban water demand management plan that complies with analogous federal laws or regulations after the effective date of this part, and which substantially meets the requirements of this part, or by any existing urban water management plan which includes the contents of a plan required under this part.

Section 10654.

An urban water supplier may recover in its rates the costs incurred in preparing its urban water management plan, its drought risk assessment, its water supply and demand assessment, and its water shortage contingency plan and implementing the reasonable water conservation measures included in either of the plans.

Section 10655.

If any provision of this part or the application thereof to any person or circumstances is held invalid, that invalidity shall not affect other provisions or applications of this part which can be given effect without the invalid provision or application thereof, and to this end the provisions of this part are severable.

Section 10656.

An urban water supplier is not eligible for a water grant or loan awarded or administered by the state unless the urban water supplier complies with this part.

Section 10657.

The department may adopt regulations regarding the definitions of water, water use, and reporting periods, and may adopt any other regulations deemed necessary or desirable to implement this part. In developing regulations pursuant to this section, the department shall solicit broad public participation from stakeholders and other interested persons.

APPENDIX B

Public Agency Notification

Public Hearing Notice

Resolution Adopting 2025 Urban Water Management Plan

Minutes of June 17, 2026 Board Meeting

VISTA IRRIGATION DISTRICT

1391 Engineer Street • Vista, California 92081-8840
Phone (760) 597-3100 • Fax: (760) 598-8757
www.vidwater.org

NOTICE OF PUBLIC HEARINGS

In accordance with California Water Code Sections 10608.26 and 10642, notice is hereby given that the Vista Irrigation District ("District") Board of Directors will hold public hearings in its Boardroom located at 1391 Engineer Street, Vista, CA 92081, to receive comments and consider adoption of the 2025 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (also referred to as the Water Supply Response Program). The 2025 UWMP is available for public review on the District website at https://www.vidwater.org/public-notices. A hard copy of the 2025 UWMP is also available for public review outside the lobby during normal business hours at the above noted address.

Consistent with Water Code 10608.26, the public hearing will allow public input and comment on any aspect of the UWMP, specifically including the following:

(1) The District's implementation plan for complying with UWMP requirements.
(2) The economic impacts of the District's implementation plan.

The public hearing will be held at 9:00 AM, or as soon thereafter as the matter may be heard, on Wednesday, June 17, 2026. Pursuant to State of California Executive Orders, members of the public may participate in the public hearing through the District's teleconferencing line. Please refer to the instructions regarding how to participate provided on the posted agenda.

Vista Irrigation District encourages the active involvement of the diverse social, cultural, and economic elements of the population within its service area. Please be advised that in any later judicial or other action challenging any action taken by the District on the UWMP or any related item, you may be limited to those grounds raised either in writing or in person prior to the close of the public hearing. For further information concerning the 2025 UWMP and Water Supply Response Program, please contact Brent Reyes at (760) 597-3107. Written comments will be received at the address noted above until 9:00 AM on June 17, 2026.

Ramae Ogilvie

Ramae Ogilvie, Secretary
Board of Directors
Vista Irrigation District

APPENDIX C

Department of Water Resources
2020 Urban Water Management Plan Checklist

Urban Water Management Plan Standardized Tables

Water Wholesaler Service Area Maps

Appendix F: UWMP Checklist

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and Overview	Executive Summary
x	x	Chapter 1	10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a supplier may also choose to include a simple description at the beginning of each chapter.	Summary	Executive Summary
x	x	Section 2.2	10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	N/A

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x		Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	Plan Preparation	2-1
x	x	Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	Plan Preparation	2-2
x	x	Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	Plan Preparation	2-3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan Preparation	Section 2.4 Appendix B
x	x	Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Section 2.4.2; Appendix B
x		Section 2.4.1	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	Plan Preparation	Section 2.4

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
	x	Section 2.4.1	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	Plan Preparation	N/A
x	x	Chapter 3	10631(a)	Describe the water supplier service area.	System Description	Section 3.2; Figure3.1
x	x	Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	Section 3.2.2; Table 3-1
x	x	Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	System Description	Section 3.2.3; Table 3-3
x	x	Section 3.4.1	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	Section 3.2.4
x	x	Section 3.5	10631(a)	Describe the land uses within the service area… include the current and projected land uses within the existing or anticipated service area affecting the Supplier's water management planning. Describe the land uses within the service area.	System Description and Baselines	Section 3.3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Section 4.2
x	optional	Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	Section 4.4; Table 4-4;
x	x	Section 4.3.2	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	Section 4-4
x	optional	Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Section 4.5
x	x	Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System Water Use	Section 4.6; Table4-5
x	x	Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	Section 4.6; App. D Resolution 26-XX Water Supply Response Program

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
		Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.	System Water Use	Section 4.6
x	x	Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	Section 4.7
	x	Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	N/A

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x		Section 5.2	10608.4	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: Was considered an urban retail water supplier in 2020, Met its 2020 target in 2020, or Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	Baselines and Targets	Section 5.1, Table 5-1
x		Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	Section 5.2; Table5-5
x	x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	System Supplies	Chapter 6;Sections 4.7,7.1-7.4; Tables7-1, 7-2, & 7-3.

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System Supplies	Section 6.1; Sections6.1.1-6.1.5; Tables 6-1 through 6-4
x	x	Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	Section 6.1; Sections 6.1.1-6.1.5; Tables 6-1 through 6-4
x	x	Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2025, 2030, 2035, 2040 and optionally 2045.	System Supplies	Section 6.1; Sections6.1.1-6.1.5; Tables6-1 through 6-4
x	x	Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Section 6.2; Section 6.2.2
x	x	Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water… (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	Water Supplies and Recycled Water	Chapter 6; Section 6.2.2

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System supplies	Section 6.2.2
x	x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	Chapter 6; Section 6.2.1
x	x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the supplier has the legal right to pump.	System Supplies	N/A
x	x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins… describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	Sections 6.2.2 and 6.2.3
x	x	Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Section 6.2.4;Table 6-5

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System Supplies	Section 6.3; Table 6-5
x	x	Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	System Supplies	Table 6-9
x	x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	System Supplies	Section 6.7
x	x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Section 6.5.1, 6.5.2 and 6.5.3;
x	x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Sections 6.5.1,6.5.2 and 6.5.3
x	x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System Supplies (Recycled Water)	Sections 6.5.1,6.5.4 and 6.5.5

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Sections 6.5.1,6.5.2 and 6.5.4
x	x	Section 6.2.5	10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Section 6.5.5
x	x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Section 6.5.5
x	x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Section 6.6
x	x	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the supplier’s service area with quantified amount of collection and treatment and the disposal methods.	System Supplies (Recycled Water)	Section 6.5.2

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and for a period of drought lasting 5 consecutive water years.	System Supplies	Sections 6.8 and 6.9; Table 6-7
x	x	Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a supplier can readily obtain.	System Suppliers, Energy Intensity	Appendix G
x	x	Section 7.1	10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Section 6.10;Sections 6.10.1 -6.10.6
x	x	Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Appendix E
x	x	Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Chapter7; Section 7.1

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water Supply Reliability Assessment	Section 7.4; Table 7-5
x	x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Water Supply Reliability Assessment	Section 7.4; Table7-4; Appendix C
x	x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water Supply Reliability Assessment	Sections 7.1 - 7.4; Table 7-4; Appendix C
x	x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	Section 7.4; Table 7-4; Appendix C
x	x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water Supply Reliability Assessment	Sections 7.1 - 7.4; Tables 7-4 and7-5; Appendix C

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	Appendix D - Resolution 21-29 Water Supply Response Program
x	x	Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	Chapter 8;Section 8.1
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	Chapter 7;Chapter 8
x	x	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the supplier will use each year to determine its water reliability.	Water Shortage Contingency Planning	Section 8.2;Table 8-1
x	x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water Shortage Contingency Planning	Section 8.2;Table 8-1

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water Shortage Contingency Planning	Section 8.3;Table 8-2
x	x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	N/A
x	x	Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	Section 8.4;Section 8.4.2
x	x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	Section 8.4.1;Table 8-3;Chapter 9; Appendix D

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	Section 8.4.3; App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to state-mandated prohibitions are appropriate to local conditions.	Water Shortage Contingency Planning	Section 8.4.4; App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water Shortage Contingency Planning	Table 8-3; App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	Section 8.4.6; Appendix F
x	x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water Shortage Contingency Planning	Section 8.5 App D Resolution 21-29 Water Supply Response Program

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.5	10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water Shortage Contingency Planning	Section 8.5; App D Resolution 21-29 Water Supply Response Program
x		Section 8.6	10632(a)(6)	Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water Shortage Contingency Planning	Section 8.9; Table 8-6;App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Water Shortage Contingency Planning	Section 8.7; App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.7	10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water Shortage Contingency Planning	Chapter 8; App D Resolution 21-29 Water Supply Response Program

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Section 8.8; App D Resolution 21-29 Water Supply Response Program
x	x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Section 8.8; App D Resolution 21-29 Water Supply Response Program
x		Section 8.8	10632(a)(8)(C)	Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought	Water Shortage Contingency Planning	Appendix D
x		Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	Appendix D
x	x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	Appendix D

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x		Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water Shortage Contingency Planning	Appendix D
x	x	Section 8.12	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	Appendices B & D; www.vidwater.org / conservation-related-documents
	x	Sections 9.2	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	N/A
x		Sections 9.1	10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Section 9.2.7;Section 9.3

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x		Chapter 10	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan Adoption, Submittal, and Implementation	Section 10.3; Appendix B
x	x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.1;Table 10-1; Appendix B
x	x	Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2025 plan to the department by July 1, 2026.	Plan Adoption, Submittal, and Implementation	Section 10.4
x	x	Sections 10.2.2,10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	Section 10.2.2; Appendix B
x	x	Section 10.2.2	10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Section 10.2.1; Appendix B

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Section 10.3; Appendix B
x	x	Section 10.4	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Appendix B
x	x	Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Section 10.4; Appendix B
x	x	Sections 10.4.1and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Section 10.4
x	x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Appendix B; https://www.vidwater.org/planning-documents

Retail	Wholesale	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2025 UWMP Location (Optional Column for Agency Review Use)
x	x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Appendix D; https://www.vidwater.org/conservation-related-documents
x	x	Section 10.6	10621(c)	If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan Adoption, Submittal, and Implementation	N/A
x	x	Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	Appendix D

Vista Irrigation District
Submittal Tables for the
2025 Urban Water Management Plan

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
Add additional rows as needed			
3710027	Vista Irrigation District	29,156	16,977
	Total	29,156	16,977
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES:			

Submittal Table 2-2: Plan Identification		
Select One	**Type of Plan**	**Name of Regional Alliance or RUWMP** (Drop Down List)
☑	**Individual UWMP**	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	
☐	**Regional Urban Water Management Plan (RUWMP)**	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☐	Supplier is a wholesale supplier
☑	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☐	UWMP Tables are in calendar years
☑	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
7/1	
Units of measure used in UWMP (Select from the drop down list).	
Unit	AF
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name
Add additional rows as needed
San Diego County Water Authority
NOTES:

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	134,501	130,551	131,369	130,895	129,466	128,037
NOTES:						

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual
Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family		Potable	8,035
Multi-Family		Potable	3,025
Commercial		Potable	1,231
Industrial		Potable	573
Institutional/Governmental		Potable	505
Landscape		Potable	1,922
Groundwater recharge			-
Saline water intrusion barrier			-
Agricultural		Potable	640.57
Sales/Transfers/Exchanges to other			
Distribution System Water Loss	Real and Apparent Losses	Potable	618.67
Other (optional)	Mobile Homes	Potable	385.62
Other (optional)	Billed Unmetered	Potable	1.53
Other (optional)	Unbilled Metered	Potable	4.97
Other (optional)	Unbilled Unmetered	Potable	40.79
Other (optional)	Water Audit Storage Adjustment	Potable	-6
		Subtotal Potable	16,977
		Subtotal Non-Potable	0
		Total	16,977

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES:

1 VID does not currently replenish groundwater supplies or inject water into freshwater aquifers to prevent intrusion of saltwater.

2 Agricultural irrigation includes single accounts that provide water for agricultural as well as domestic use. All accounts and deliveries for agricultural-domestic use are assigned to this use type.

3 VID does not wholesale water to other agencies. All exchanges of potable water with other agencies are tracked by the District's wholesale agency, the San Diego County Water Authority, and demands are allocated to each agency accordingly.

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description (as needed)	**Projected Water Use** (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	**2030 (AF)**	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 opt (AF)**
Add additional rows as needed.							
Single Family		Potable	7,544	7,652	7,769	7,813	7,857
Multi-Family		Potable	2,840	2,880	2,924	2,941	2,958
Commercial		Potable	1,156	1,172	1,190	1,197	1,204
Industrial		Potable	538	546	554	557	561
Institutional/Governmental		Potable	474	481	488	491	494
Landscape		Potable	1,805	1,830	1,858	1,869	1,880
Groundwater recharge			N/A	N/A	N/A	N/A	N/A
Saline water intrusion barrier			N/A	N/A	N/A	N/A	N/A
Agricultural		Potable	601	610	619	623	626
Sales/Transfers/Exchanges to other Suppliers			N/A	N/A	N/A	N/A	N/A
Distribution System Water Loss		Potable	876	876	876	876	876
Other (optional)	Mobile Homes	Potable	362	367	373	375	377
Other (optional)		Non-Potable	N/A	N/A	N/A	N/A	N/A
Other (optional)	Billed unmetered	Potable	10	10	10	10	10
Other (optional)	Unbilled metered	Potable	4	4	4	4	4
Other (optional)	Unbilled Unmetered	Potable	40	40	40	40	40
		Subtotal Potable	16,250	16,469	16,706	16,796	16,886
		Subtotal Non-Potable	0	0	0	0	0
		Total	16,250	16,469	16,706	16,796	16,886
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES:							

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? **Drop down list (y/n)**	No
If "Yes" to above, **state the section or page number**, in the cell to the right, where citations of the codes, ordinances, or otherwise are utilized in demand projections are found. ***Optional*** Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	
Are Lower Income Residential Demands Included In Projections? **Drop down list (y/n)**	Yes
Optional If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES:	

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
3710027	**2020**	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES:		

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit			State Water Board Standard		Most Recent AWWA Water Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
CA3710027	Yes	24.9	Gallons per Service Connection per Day (GPSCD)	28811	377.582	11.7	11.7	Gallons per Service Connection per Day (GPSCD)	28811	241.082	7.5

Water Board's Calculated Water Loss Standards

DWR NOTES: Units of measure (AF, CCF, MG) for Water Loss **MUST** remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations.

NOTES:

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
☐	**Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.**					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	**Only for suppliers that did not meet the Target in 2020** **See DWR NOTES below.**	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	142	109	yes		NA

DWR NOTES:
Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies.
Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance.
NA=Not Applicable

NOTES:

Submittal Table 6-1 Retail: Groundwater Volume Pumped
Water Code Section 10631(4) and 10631(4)(c)

☑	Check the box if the Supplier does not pump groundwater. Proceed to the next table.
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)

Groundwater Type **Drop Down List** May use each category multiple times	Potable or Non-Potable (OPTIONAL) **Drop down list**	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
Add additional rows as needed							
Alluvial Basin		Warner Basin					
		Total	0	0	0	0	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

NOTES Because pumped groundwater is stored in an open reservoir and blended with surface run-off, it is reported as surface water production. Approximately 1/3 of water held in the lake evaporates; of the portion that is delivered 40% is for VID use, 40% for City of Escondido, and 20% for the Rincon Band under the terms of the Settlement Agreement.

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area
Water Code Section 10633(a)

☐	Check the box if there is no wastewater collection system. Proceed to the next table.
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)
	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)

Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL **Drop Down List**	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number **Drop down list**	Is WWTP Located Within UWMP Area? **Drop Down List**
Add additional rows as needed				
Buena Sanitation District	Metered	2,240	Encina Water Pollution Control Facility, Place ID 222758	No
City of Vista	Metered	7,673	Encina Water Pollution Control Facility, Place ID 222758	No
Total Wastewater Received from UWMP Service Area in 2025:		9,913		

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area
Water Code Section 10633(b)

☑	**Check the box if no wastewater is treated or disposed of within the UWMP service area.** Proceed to the next table.

Wastewater Treatment Plant Name and Place ID Number **Drop down list**	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) **Drop down list**	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (AF)	Total 2025 Volume of Water Treated (AF)	**2025 Outcomes of Treated Wastewater**										
				Water Recycled Within UWMP Service Area (enter data as applicable)		**Water Recycled Outside of UWMP Service Area** (enter data as applicable)		**Effluent Discharge that is not a Permitted Recycled Water Use** (enter data as applicable)		**Required Discharge for Instream Flow** (enter data as applicable)		**Delivered to Another Entity for Additional Treatment** (enter data as applicable)		
				Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Treatment Level **Drop down list**	Volume (AF)	Name of other entity
Add additional rows as needed														
Total		0	-		0		0		0		0		0	

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area
Water Code Section 10633 (c),(d),(e)

☑	Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.

Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :	
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :	
Volume of Supplemental Water Added in 2025 (OPTIONAL) :	
Source of 2025 Supplemental Water (OPTIONAL) :	

Use Type **Drop down list**	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	**Potential Recycled Water Use**	
									Volume	Narrative page number (OPTIONAL)
Add additional rows as needed										
									0	
		Subtotal Potable	0	0	0	0	0	0	0	
		Subtotal Non-Potable	0	0	0	0	0	0	0	
		Total	0	0	0	0	0	0	0	0

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.
Potential recycled water use: a description of the feasibility of these uses must be included in the narrative.
Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.

NOTES:

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
☑	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. Proceed to the next table.	
Use Type Drop Down list	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Add additional rows as needed		
Total	0	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
☑	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
50	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
Add additional rows as needed			
		Total (AF)	0
		Unit Conversion to AF	0

DWR NOTES:
Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.

NOTES:

Submittal Table 6-8 Retail: Water Supplies — Actual
Water Code Section 10631(b)

Water Supply		2025		
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Description (as needed)	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed				
Purchased or Imported Water	San Diego County Water Authority		3,956	
Other (optional)	Reclamation		7,900	
Surface water (not desalinated)	Lake Henshaw		5,121	
		Subtotal Potable	0	0
		Subtotal Non-Potable	0	0
		Total	16,977	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES: Reclamation water delivered pursuant to Settlement Agreement (See Section 6.1.5 of the UWMP).

Submittal Table 6-9 Retail: Water Supplies — Projected
Water Code Section 10631 (b)

Water Supply			Projected Water Supply (Report to the Extent Practicable)									
			2030		2035		2040		2045		2050 (opt)	
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool	Additional Detail on Water Supply	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop Down list	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed												
Surface water (not desalinated)	Lake Henshaw		2,700		2,700		4,700		4,700		4,700	
Other (optional)	Reclamation		8,000		8,000		8,000		8,000		8,000	
Purchased or Imported Water	Water Authority		5,550		5,769		4,006		4,096		4,186	
		Subtotal Potable	0	0	0	0	0	0	0	0	0	0
		Subtotal Non-Potable	0	0	0	0	0	0	0	0	0	0
		Total	16,250	0	16,469	0	16,706	0	16,796	0	16,886	0

DWR NOTES:

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.

Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES: Reclamation water delivered pursuant to Settlement Agreement (See Section 6.1.5 of the UWMP).

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		☐	Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** [insert location from UWMP]
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	**% of Average Supply**
Average Year	2025		100%
Single-Dry Year	2025		110%
Consecutive Dry Years 1st Year	2026		110%
Consecutive Dry Years 2nd Year	2027		110%
Consecutive Dry Years 3rd Year	2028		110%
Consecutive Dry Years 4th Year	2029		110%
Consecutive Dry Years 5th Year	2030		110%

DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 R if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 R, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 R are being used and identify the particular water source that is being reported in each submittal table.

Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the units of measure reported in Submittal Table 2-3.

NOTES:

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	16,250	16,469	16,706	16,796	16,886
Use totals (autofill from Submittal Table 4-2 R)	16,250	16,469	16,706	16,796	16,886
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals	17,875	18,116	18,377	18,476	18,575
Use totals	17,875	18,116	18,377	18,476	18,575
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	17,875	18,116	18,377	18,476	18,575
	Use totals	17,875	18,116	18,377	18,476	18,575
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals	17,923	18,168	18,396	18,495	
	Use totals	17,923	18,168	18,396	18,495	
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals	17,971	18,220	18,416	18,515	
	Use totals	17,971	18,220	18,416	18,515	
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals	18,018	18,272	18,436	18,535	
	Use totals	18,018	18,272	18,436	18,535	
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals	18,066	18,324	18,456	18,555	
	Use totals	18,066	18,324	18,456	18,555	
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.						
NOTES:						

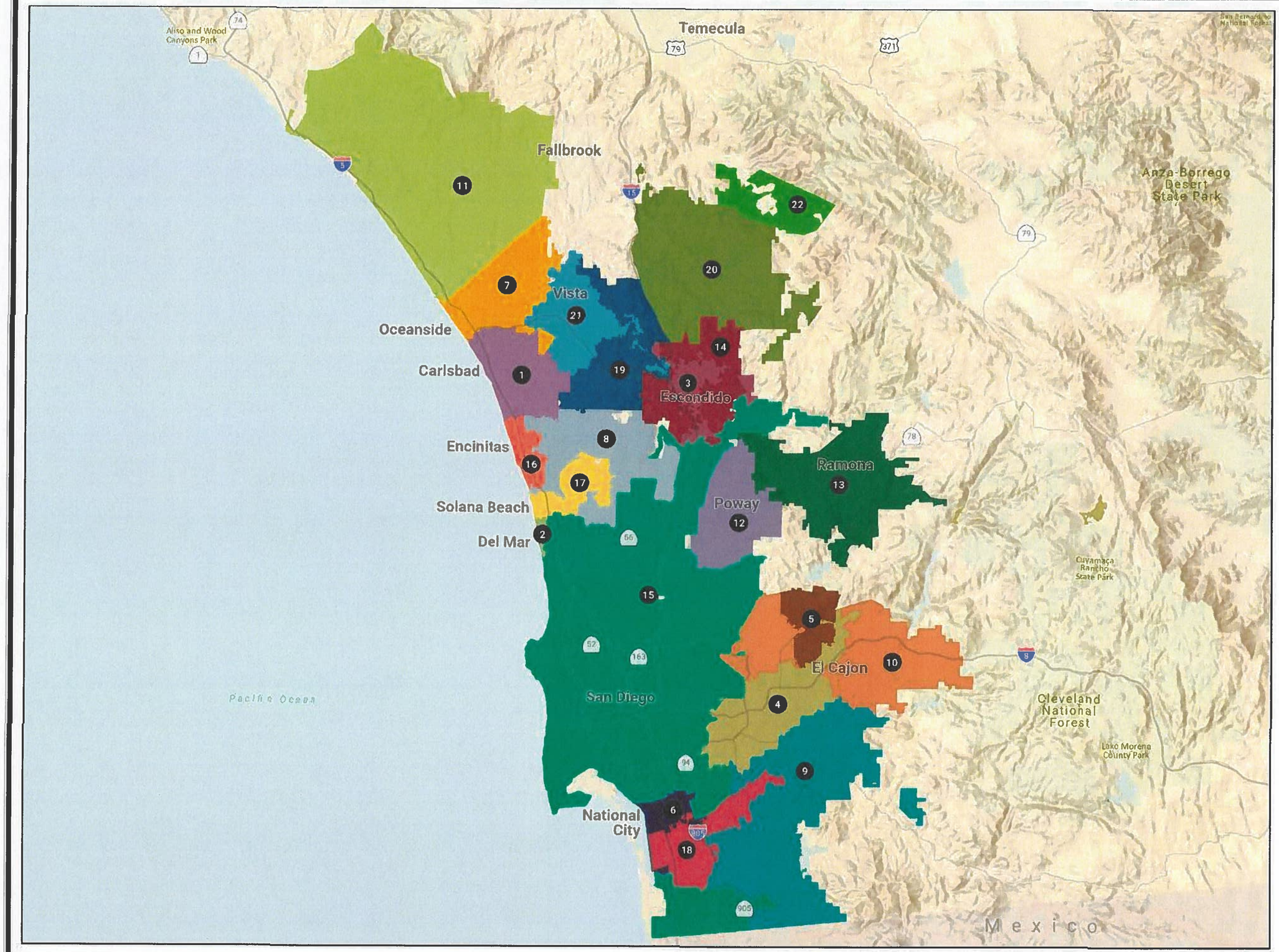
Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	**Total**
Total Water Use (AF)	18,505
Total Supplies (AF)	18,505
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2027	**Total**
Total Water Use (AF)	18,505
Total Supplies (AF)	18,505
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2028	**Total**
Total Water Use (AF)	18,844
Total Supplies (AF)	18,844
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2029	**Total**
Total Water Use (AF)	19,354
Total Supplies (AF)	19,354
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2030	**Total**
Total Water Use (AF)	19,693
Total Supplies (AF)	19,693
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
☑	Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.		
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**Percent Shortage Range**
1	Up to 10%		
2	Up to 20%		
3	Up to 30%		
4	Up to 40%		
5	Up to 50%		
6	>50%		
NOTES:			

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
2	Other Actions (describe)	Percentage	Up tp 20%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
3	Other Actions (describe)	Percentage	Up to 30%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
4	Other Actions (describe)	Percentage	Up to 40%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
5	Other Actions (describe)	Percentage	Up to 50%	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
6	Other Actions (describe)	Percentage	50% of higher	The District has no independent plans to augment its current water supplies, which include local surface water, Reclamation and purchased water. As a secondary system, the District will rely on the comprehensive contingency plans developed by its regional wholesalers, Metropolitan and the Water Authority.
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES:				

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B),(D), and (E)					
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only** Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
Add additional rows as needed					
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Percentage	0		Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Percentage	0		Yes
1	Other - Require automatic shut of hoses	Percentage	0		Yes
1	Other - Prohibit use of potable water for washing hard surfaces	Percentage	0		Yes
1	Landscape - Limit landscape irrigation to specific times	Percentage	0		Yes
2	Landscape - Limit landscape irrigation to specific days	Percentage	0-20		Yes
3	Moratorium or Net Zero Demand Increase on New Connections	Percentage	20-30		Yes
3	Other	Percentage	20-30	Water allocations for individual properties	Yes
4	CII - Other CII restriction or prohibition	Percentage	30-40	CII landscape irrigation prohibitions	Yes
5	Landscape - Other landscape restriction or prohibition	Percentage	40-50	Residential landscape irrigation prohibitions	Yes
6	Landscape - Prohibit all landscape irrigation	Percentage	50 or higher		Yes
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

Submittal Table 10-1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City Name	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
Escondido	Yes	Yes
Oceanside	Yes	Yes
San Marcos	Yes	Yes
County Name **Drop Down List**	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
Add additional rows as needed		
San Diego County	Yes	Yes
NOTES:		



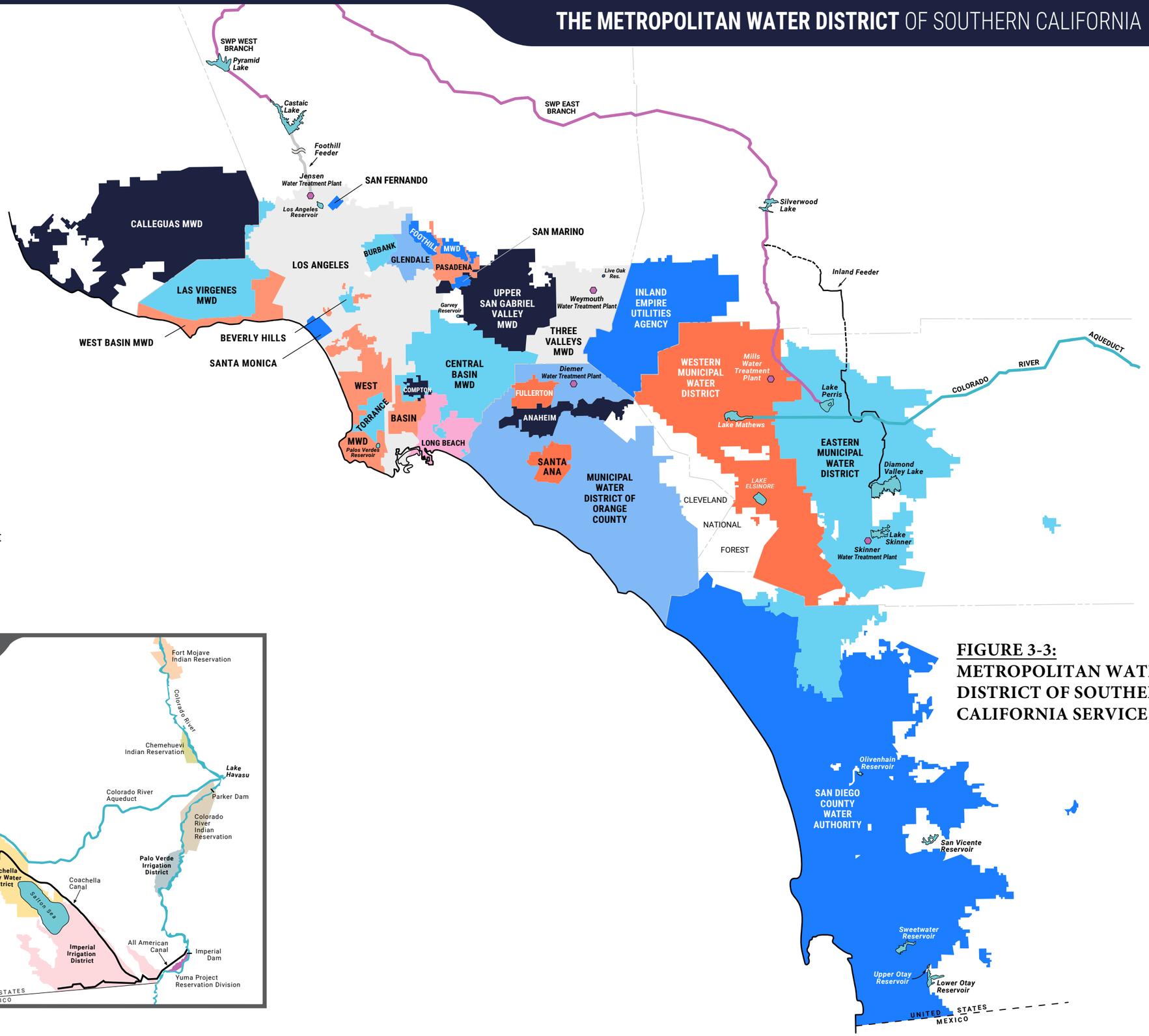
1 Carlsbad MWD
2 City of Del Mar
3 City of Escondido
4 Helix Water District
5 Lakeside Water District
6 City of National City*
7 City of Oceanside
8 Olivenhain MWD
9 Otay Water District
10 Padre Dam MWD
11 Camp Pendleton Marine Corps Base
12 City of Poway
13 Ramona MWD
14 Rincon del Diablo MWD
15 City of San Diego
16 San Dieguito Water District
17 Santa Fe Irrigation District
18 South Bay Irrigation District*
19 Vallecitos Water District
20 Valley Center MWD
21 Vista Irrigation District
22 Yuima MWD

FIGURE 3-2:

SAN DIEGO COUNTY WATER AUTHORITY SERVICE AREA MAP

* The Sweetwater Authority is a service organization for the City of National City and the South Bay Irrigation District.

0 5 10 Miles



METROPOLITAN'S MEMBER AGENCIES

LEGEND

- Department of Water Resources' California Aqueduct
- Metropolitan's Colorado River Aqueduct
- Water Treatment Plants

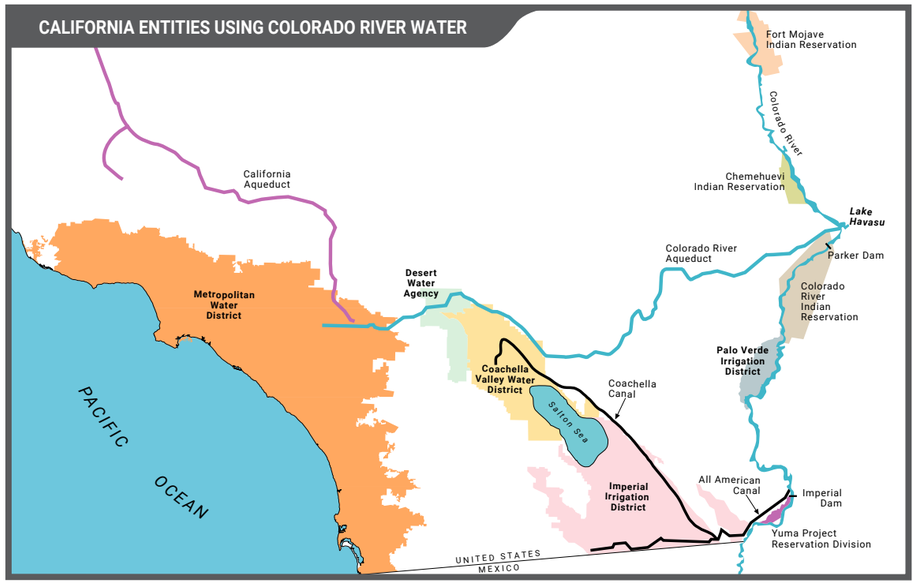


FIGURE 3-3:
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA SERVICE AREA MAP

APPENDIX D

Resolution No. 26-xx
Water Supply Response Program

RESOLUTION NO. 26-XX

RESOLUTION OF THE BOARD OF DIRECTORS
OF VISTA IRRIGATION DISTRICT AMENDING THE DISTRICT'S
WATER SUPPLY RESPONSE PROGRAM

WHEREAS, article 10, section 2 of the California Constitution declares that waters of the State are to be put to beneficial use; that waste, unreasonable use, or unreasonable method of use of water be prevented; and that water be conserved for the public welfare; and

WHEREAS, conservation of current water supplies and minimization of the effects of water supply shortages are essential to the public health, safety and welfare; and

WHEREAS, regulation of the time of certain water use, manner of certain water use, design of rates, method of application of water for certain uses, and installation and use of water-saving devices, provide an effective and immediately available means of conserving water; and

WHEREAS, California Water Code sections 375 et seq. authorize water suppliers to adopt and enforce a comprehensive water conservation program; and

WHEREAS, the Board of Directors of Vista Irrigation District (District) amended its Drought Response Conservation Program and renamed it the Water Supply Response Program on June 1, 2011, and amended the Water Supply Response Program adopted on May 27, 2015 as part of the District's 2015 Urban Water Management Plan; and amended the Water Supply Response Program adopted on June 16, 2021 as part of the District's 2020 Urban Water Management Plan; and

WHEREAS, amendment and enforcement of a comprehensive water conservation program will allow the District to delay or avoid implementing measures such as water rationing or more restrictive water use regulations pursuant to a declared water shortage emergency as authorized by California Water Code sections 350 et seq.; and

WHEREAS, San Diego County is a semi-arid region and local water resources are scarce. The region is dependent upon imported water supplies provided by the San Diego County Water Authority (Water Authority), which obtains a substantial portion of its supplies from the Metropolitan Water District of Southern California. Because the region is dependent upon imported water supplies, weather and other conditions in other portions of this State and of the Southwestern United States affect the availability of water for use in San Diego County; and

WHEREAS, the Water Authority has an Urban Water Management Plan that includes water conservation as a necessary and effective component of the Water Authority's programs to provide a reliable supply of water to meet the needs of the Water Authority's 22 member public agencies, including the District. The Water Authority's Urban Water Management Plan also includes a contingency analysis of actions to be taken in response to water supply shortages. This resolution is consistent with the Water Authority's Urban Water Management Plan; and

WHEREAS, as anticipated by its Urban Water Management Plan, the Water Authority, in cooperation and consultation with its member public agencies, has established a program for responding to water supply limitations. This resolution is intended to be consistent with the Water Authority's Water Shortage Contingency Plan; and

WHEREAS, this resolution contains six levels and corresponding actions that will assist the District in meeting conservation targets; and

WHEREAS, the District, due to the geographic and climatic conditions within its territory and its dependence upon water imported and provided by the Water Authority, may experience shortages due to drought conditions, regulatory restrictions enacted upon imported supplies and other factors. The District has adopted an Urban Water Management Plan that includes water conservation as a necessary and effective component of its programs to provide a reliable supply of water to meet the needs of the public within its service territory. The District's Urban Water Management Plan also includes a contingency analysis of actions to be taken in response to water supply shortages. This resolution is consistent with the Urban Water Management Plan adopted by the District; and

WHEREAS the water-use efficiency practices, water conservation measures and progressive restrictions on water use and method of use identified by this resolution provide certainty to water users and enable the District to control water use, provide water supplies, and plan and implement water management measures in a fair and orderly manner for the benefit of the public; and

WHEREAS, a public hearing was held upon the proposed amended Water Supply Response Program (also referred to as Water Shortage Contingency Plan) at the Board of Directors meeting on June 17, 2026, at which all present were given an opportunity to be heard on the proposed amended Water Supply Response Program; and

WHEREAS, the Board of Directors has considered the proposed amended Water Supply Response Program and the evidence and testimony presented at the June 17, 2026 public hearing.

NOW, THEREFORE, the Board of Directors of Vista Irrigation District does resolve as follows:

ARTICLE ONE: The Water Supply Response Program is amended and restated, in its entirety as follows:

SECTION 1.0 DECLARATION OF NECESSITY AND INTENT

(a) This resolution establishes water management requirements necessary to conserve water, enable effective water supply planning, assure reasonable and beneficial use of water, prevent waste of water, prevent unreasonable use of water, prevent unreasonable method of use of water within the District in order to assure adequate supplies of water to meet the needs of the public, and further the public health, safety, and welfare, recognizing that water is a scarce natural resource that requires careful management not only in times of drought, but at all times.

(b) This resolution establishes regulations to be implemented at all times including during times of declared water shortages or declared water shortage emergencies. It establishes six levels of actions, with increasing restrictions on water use in response to worsening water supply conditions and decreasing available supplies.

(c) During Levels 1 through 6, all water-use efficiency practices, water conservation measures and water use restrictions are mandatory and become increasingly restrictive in order to attain escalating conservation goals.

(d) During all Levels, violations of water-use efficiency practices, water conservation measures and water use restrictions established by this resolution are subject to criminal, civil, and administrative remedies and penalties, including fees specified in this resolution.

SECTION 2.0 DEFINITIONS

(a) The following words and phrases whenever used in this chapter shall have the meaning defined in this section:

1. "Grower" refers to those engaged in the growing or raising, in conformity with recognized practices of husbandry, for the purpose of commerce, trade, or industry, or for use by public educational or correctional institutions, of agricultural, horticultural or floricultural products, and produced: (1) for human consumption or for the market, or (2) for the feeding of fowl or livestock produced for human consumption or for the market, or (3) for the feeding of fowl or livestock for the purpose of obtaining their products for human consumption or for the market. "Grower" does not refer to customers who purchase water subject to the Water Authority's Permanent Special Agricultural Water Rate program.

2. "District" means Vista Irrigation District

3. "Water Authority" means the San Diego County Water Authority.

4. "Metropolitan" means the Metropolitan Water District of Southern California.

5. "Person" means any natural person, corporation, public or private entity, public or private association, public or private agency, government agency or institution, school district, college, university, or any other user of water provided by the District.

6. "Plan" means the District's Urban Water Management Plan.

7. "Annual Assessment" means the Annual Water Supply and Demand Assessment submitted by the District each year to the State of California to determine the short term water reliability for the upcoming fiscal year.

8. "DWR" means the State of California Department of Water Resources.

9. "WSRP" means the District's Water Supply Response Program.

10. "WSCP" means Water Shortage Contingency Plan which is analogous to the District's Water Supply Response Program.

12. "State Board" means the State of California Water Resources Control Board.

13. "Functional turf" means a ground cover surface of turf located in a recreational use area or community space. Turf enclosed by fencing or other barriers to permanently preclude human access for recreation or assembly is not functional turf.

14. "Homeowners' association" means a nonprofit corporation or unincorporated association created for the purpose of managing a common interest development.

15. "Nonfunctional turf" means any turf that is not functional turf, and includes turf located within street rights-of-way and parking lots.

16. "Potable water" means water that is suitable for human consumption.

17. "Recreational use area" means an area designated by a property owner or a governmental agency to accommodate human foot traffic for recreation, including, but not limited to, sports fields, golf courses, playgrounds, picnic grounds, or pet exercise areas. This recreation may be either formal or informal.

18. "Common area" means that portion of a common interest development or of a property owned or managed by a homeowners' association or a community service organization or similar entity that is not assigned or allocated to the exclusive use of the occupants of an individual dwelling unit within the property.

19. "Common interest development" means any of the following:

(a) A community apartment project.
(b) A condominium project.
(c) A planned development.
(d) A stock cooperative.

20. "Community service organization or similar entity" means a nonprofit entity, other than an association, that is organized to provide services to residents of the common interest development or to the public in addition to the residents, to the extent community common area or facilities are available to the public. "Community service organization or similar entity" does not include an entity that has been organized solely to raise moneys and contribute to other nonprofit organizations that are qualified as tax exempt under Section 501(c)(3) of the Internal Revenue Code and that provide housing or housing assistance.

21. "Community space" means an area designated by a property owner or a governmental agency to accommodate human foot traffic for civic, ceremonial, or other community events or social gatherings.

22. "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

SECTION 3.0 APPLICATION

(a) The provisions of this resolution apply to any person in the use of any water provided by the District.

(b) This resolution is intended to maintain efficient water use practices and to further the conservation of water. It is not intended to implement any provision of federal, State, or local statutes, resolutions, or regulations relating to protection of water quality or control of drainage or runoff. Refer to the local jurisdiction or Regional Water Quality Control Board for information on any stormwater resolutions and stormwater management plans.

(c) Nothing in this resolution is intended to affect or limit the ability of the District to declare and respond to an emergency, including an emergency that affects the ability of the District to supply water.

(d) The provisions of this resolution do not apply to use of water from private wells or to recycled water.

(e) Nothing in this resolution shall apply to use of water that is subject to a special supply program, such as the Water Authority's Permanent Special Agricultural Water Rate. Violations of the conditions of special supply programs are subject to the penalties established under the applicable program. A person using water subject to a special supply program and other water provided by the District is subject to this resolution in the use of the other water.

(f) When the General Manager has determined that the District's water supply is in a water emergency condition, everyone shall be required to reduce water consumption as prescribed by the General Manager.

(g) The General Manager shall have the authority and discretion to interpret and apply the provisions set forth in the Water Supply Response Program as long as the interpretations and applications of the measures meet the intent and goals of the Water Supply Response Program.

SECTION 4.0 LEVEL 1 – WATER EFFICIENCY

(a) Level 1 is also referred to as the "Water Efficiency" level. Level 1 applies at all times and up to and including 10 percent water shortage, unless the District Board of Directors has declared another level, per the procedures set forth in this resolution. Level 1 is designed to ensure customers use water efficiently and eliminate water waste at all times.

(b) At Level 1, the District will utilize its public education and outreach efforts to raise public awareness of the following mandatory water-use efficiency practices:

1. No washing down paved surfaces, including but not limited to sidewalks, driveways, parking lots, tennis courts, or patios, except when it is necessary to alleviate safety or sanitation hazards or to maintain, repair, construct/reconstruct streets.

2. No water waste resulting from inefficient landscape irrigation, such as runoff, low head drainage, or overspray, etc. Similarly, water shall not flow onto non-targeted areas, such as adjacent property, non-irrigated areas, hardscapes, roadways, or structures.

3. No irrigating residential or commercial landscapes during or within 48 hours following measurable rainfall.

4. Irrigate residential and commercial landscape with in-ground or hose-end sprinkler systems before 8 a.m. and after 6 p.m. only. Irrigation of new turf and/or plantings is exempt from these watering hour restrictions for a period of 30 days following the date of planting. Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used.

5. Irrigate nursery and commercial grower's products before 8 a.m. and after 6 p.m. only. Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time.

6. Use potable water taken through construction meters to irrigate landscape before 8 a.m. and after 6 p.m. Watering is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used.

7. Irrigate landscape outside of newly constructed homes and buildings in a manner that is consistent with regulations or other requirements established by the California Building Standards Commission and the Department of Housing and Community Development.

8. Use re-circulated water to operate ornamental fountains.

9. Wash vehicles using a bucket and a hand-held hose with positive shut-off nozzle, mobile high pressure/low volume wash system, or at a commercial site that re-circulates (reclaims) water on-site. Avoid washing during hot conditions when additional water is required due to evaporation.

10. Serve and refill water in restaurants and other food service establishments only upon request.

11. Offer guests in hotels, motels, and other commercial lodging establishments the option of not laundering towels and linens daily.

12. Repair all water leaks within 48 hours of notification by the District unless other arrangements are made with the General Manager.

13. Use recycled or non-potable water for construction purposes when available.

14. The use of potable water for the irrigation of nonfunctional turf located on commercial, industrial, and institutional properties, other than a cemetery, and on properties of homeowners' associations, common interest developments, and community service organizations or similar entities is prohibited as of the following dates:

(a) All properties owned by the Department of General Services, beginning January 1, 2027.
(b) All properties owned by local governments, local or regional public agencies, and public water systems, except those specified in paragraph (5), beginning January 1, 2027.

(c) All other institutional properties and all commercial and industrial properties, beginning January 1, 2028.

(d) All common areas of properties of homeowners' associations, common interest developments, and community service organizations or similar entities, beginning January 1, 2029.
(e) All properties owned by local governments, local public agencies, and public water systems in a disadvantaged community, beginning January 1, 2031, or the date upon which a state funding source is made available to fund conversion of nonfunctional turf on these properties to climate-appropriate landscapes, whichever is later.

(f) Notwithstanding subdivision 14, the use of potable water is not prohibited by this section to the extent necessary to ensure the health of trees and other perennial non-turf plantings, or to the extent necessary to address an immediate health and safety need.

(g) The State Board may, upon a showing of good cause for reasons including economic hardship, critical business need, and potential impacts to human health or safety, postpone a compliance deadline in subdivision (a) by up to three years for certain persons, institutions, and businesses, and may create a form to be used for compliance certification to the board by property owners.

SECTION 5.0 LEVEL 2 – WATER CONSERVATION

(a) A Level 2 may be declared under the following conditions: 1) when the Water Authority notifies its member agencies that due to cutbacks caused by drought or other reduction in supplies, a consumer demand reduction is required in order to have sufficient supplies available to meet anticipated demands; 2) when a consumer demand reduction is required by a regulatory agency; or 3) when other conditions exist that require a consumer demand reduction. The consumer demand reduction amounts in Level 2 typically apply during a shortage of up to and including 20 percent, although the District Board of Directors may declare Level 2 and implement the mandatory Level 2 conservation measures identified in this resolution to achieve a consumer demand reduction of a different amount. The General Manager shall have the authority and discretion to implement water conservation measures commensurate with the level of demand reduction required and/or the reduction targets achieved, as described in Section 5 (b) below. The General Manager shall inform the Board of Directors of the status of the implementation of the measures set forth in this section and the resulting water conservation in a timely manner.

(b) All persons using District water shall comply with Level 1 water-use efficiency practices during Level 2, and shall also comply with the following additional mandatory conservation measures:

1. Stop watering ornamental turf in public street medians with potable water.

2. Irrigate residential and commercial landscape with in-ground or hose-end sprinkler systems before 8 a.m. and after 6 p.m. only.

3. Irrigate nursery and commercial grower's products before 8 a.m. and after 6 p.m. only. Watering by nurseries and commercial growers is permitted at any time with a hand-held hose equipped with a positive shut-off nozzle, a bucket, or when a drip/micro-irrigation system/equipment is used. Irrigation of nursery propagation beds is permitted at any time. Watering of livestock is permitted at any time.

4. Irrigation of landscape on a construction project with potable water taken through a construction meter before 8 a.m. and after 6 p.m. only.

5. Limit residential and commercial landscape irrigation to assigned days per week and limited duration times on a schedule established by the General Manager and posted by the District. This section shall not apply to commercial growers or nurseries for water that they use for agricultural purposes.

6. Limit lawn watering and landscape irrigation using in-ground or hose-end sprinklers to time limits per watering station per assigned day as established by the General Manager and posted by the District. This provision does not apply to landscape irrigation systems using drip/micro-irrigation systems and stream rotor sprinklers.

7. Turf and/or plant establishment is allowed if required by a landscape permit or necessary for erosion control, landscape renovation after a natural disaster, or establishment, repair or renovation of public use fields for schools or parks. New turf and/or plantings are exempt from irrigation limitations set forth in sections 4 (b) (3) (4), 5 (b) (1) and 5 (b) (2) for a period of 30 days following the date of planting.

8. Water landscaped areas, including trees and shrubs located on residential and commercial properties, and not irrigated by a landscape irrigation system, before 8 a.m. and after 6 p.m. only by using a bucket, hand-held hose with positive shut-off nozzle, or low-volume non-spray irrigation per assigned day as established by the General Manager and posted by the District.

9. Commercial and agricultural customers are asked to implement all measures practicable toward improving efficiency and conserving water.

SECTION 6.0 LEVEL 3 – WATER SHORTAGE

(a) Level 3 may be declared under the following conditions: 1) when the Water Authority notifies its member agencies that due to increasing cutbacks caused by drought or other reduction of supplies, a serious water shortage condition exists that requires extensive consumer demand reductions in order to have sufficient supplies available to meet anticipated demands; 2) when a similar requirement is imposed by a regulatory agency; or 3) when other conditions exist that require a serious consumer demand reduction. The consumer demand reduction amounts in Level 3 typically apply during a shortage of up to and including 30 percent, although the District Board of Directors may declare Level 3 and implement the Level 3 conservation measures identified in this resolution to achieve a consumer demand reduction of a different amount. The General Manager shall have the authority and discretion to implement water conservation measures commensurate with the level of demand reduction required and/or the reduction targets achieved, as described in Section 6 (b) below. The General Manager shall inform the Board of Directors of the status of the implementation of the measures set forth in this section and the resulting water conservation in a timely manner.

(b) All persons using District water shall comply with Level 1 water-use efficiency practices and Level 2 water conservation practices during Level 3 and shall also comply with the following additional mandatory conservation measures:

1. Comply with any new residential and commercial landscape irrigation restrictions relative to assigned days per week and limited duration times on a schedule established by the General Manager and posted by the District.

2. Stop re-filling pools/spas more than one foot per week. Draining and re-filling of pools and spas is not permitted except to repair leaks or for health and safety reasons.

3. Stop filling or re-filling ornamental lakes or ponds, except to the extent needed to sustain aquatic life, provided that such animals are of significant value and have been actively managed within the water feature prior to declaration of another level under this resolution.

4. Stop operating ornamental fountains or decorative water features. These types of fountains and water features may be operated on a limited basis for maintenance purposes only. The operation of fountains and water features that do not use re-circulated water is prohibited.

5. Stop washing vehicles except at commercial car washes that re-circulate water, or by high pressure/low volume wash systems.

(c) Upon the declaration of Level 3, no new potable water service shall be provided, no new temporary meters or permanent meters shall be provided, and no statements of immediate ability to serve or provide potable water service (such as, will serve letters, certificates, or letters of availability) shall be issued, except under the following circumstances:

1. A valid, unexpired building permit has been issued for the project; or

2. The project is necessary to protect the public's health, safety, and welfare; or

3. The applicant participates in a District-approved demand offset program that produces or saves at least the same amount of water as is being used by the new development, prior to the issuance by the District of a new water meter or water meters for the project.

This provision shall not be construed to preclude the resetting or turn-on of meters to provide continuation of water service or to restore service that has been interrupted for a period of one year or less.

(d) Upon the declaration of Level 3, District will suspend consideration of annexations to its service area.

(e) The District may establish a water allocation for property served by the District using a method that does not penalize persons for the implementation of conservation methods or the installation of water saving devices. If the District establishes a water allocation it shall provide notice of the allocation by including it in the regular billing statement for water service or by any other mailing to the address to which the District customarily mails the billing statement for fees or charges for on-going water service. Following the effective date of the water allocation as established by the District, any person that uses water in excess of the allocation shall be subject to a penalty for each billing unit of water in excess of the allocation. The penalty for excess water usage shall be cumulative to any other remedy or fee that may be imposed for violation of this resolution.

SECTION 7.0 LEVEL 4 – CRITICAL WATER SHORTAGE

(a) Level 4 applies under the following conditions: 1) when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code section 350 and notifies its member agencies that Level 4 requires a water shortage demand reduction in order for the District to maximize supplies available to meet anticipated demands; 2) when a similar requirement is imposed by a regulatory agency; or 3) when other conditions exist that require the Board of Directors to declare a water shortage emergency. The consumer demand reduction amounts in Level 4 typically apply during a shortage of up to and including 40 percent, although the District Board of Directors shall declare a Level 4 water shortage in the manner and on the grounds provided in California Water Code section 350.

(b) All persons using District water shall comply with water-use efficiency practices and conservation measures required under Levels 1 through 3 and shall also comply with the following additional mandatory conservation measures:

1. Stop all commercial landscape irrigation, unless the District has determined that recycled water is available and may be lawfully applied to the use. This restriction shall not apply to the following categories of use.

A. Maintenance of trees and shrubs that are watered on the same schedule set forth in section 6 (b) (1) by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation;

B. Maintenance of existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated;

C. Maintenance of existing landscaping for erosion control;

D. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals;

E. Maintenance of landscaping within active public parks and playing fields, day care centers, school grounds, cemeteries, and golf course greens, provided that such irrigation does not exceed two days per week according to the schedule established under section 6 (b) (1);

F. Watering of livestock; and

G. Public works projects and actively irrigated environmental mitigation projects.

H. Irrigation of crops and landscape products of commercial growers and nurseries.

2. Stop all vehicle washing, including at commercial car washes.

3. Repair all water leaks within 24 hours of notification by the District unless other arrangements are made with the General Manager.

SECTION 8.0 LEVEL 5 – WATER EMERGENCY

(a) Level 5 applies under the following conditions: 1) when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code section 350 and notifies its member agencies that Level 5 requires an emergency water demand reduction in order for the District to maximize supplies available to meet anticipated demands; 2) when a similar requirement is imposed by a regulatory agency; or 3) when other conditions exist that require the Board of Directors to declare a water shortage emergency. The consumer demand reduction amounts in Level 5 typically apply during a shortage of up to and including 50 percent, although the District Board of Directors shall declare a Level 5 water shortage in the manner and on the grounds provided in California Water Code section 350.

(b) All persons using District water shall comply with water-use efficiency practices and conservation measures required under Levels 1 through 4 and shall also comply with the following additional mandatory conservation measures:

1. Stop all residential landscape irrigation, unless the District has determined that recycled water is available and may be lawfully applied to the use. This restriction shall not apply to the following categories of use.

A. Maintenance of trees and shrubs that are watered on the same schedule set forth in section 7 (b) (1) by using a bucket, hand-held hose with a positive shut-off nozzle, or low-volume non-spray irrigation;

B. Maintenance of existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated;

C. Maintenance of existing landscaping for erosion control;

D. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals; and

E. Watering of livestock.

SECTION 9.0 LEVEL 6 – CRITICAL WATER EMERGENCY

(a) Level 6 condition applies when the Water Authority Board of Directors declares a water shortage emergency pursuant to California Water Code Section 350 and notifies its member agencies that Level 6 requires a demand reduction of more than 50% in order for the District to have

maximum supplies available to meet anticipated demands. The District shall declare a Critical Water Emergency in the manner and on the grounds provided in California Water Code section 350.

(b) All persons using District water shall comply with conservation measures required during Levels 1 through 5 conditions and shall also comply with the following additional mandatory conservation measures:

1. Stop all landscape irrigation, including maintenance of trees and shrubs, and crops and landscape products of commercial growers and nurseries at the General Manager's discretion. This restriction shall not apply to the following categories of use unless the District has determined that recycled water is available and may be lawfully applied to the use.

A. Maintenance of existing landscaping necessary for fire protection as specified by the Fire Marshal of the local fire protection agency having jurisdiction over the property to be irrigated;

B. Maintenance of existing landscaping for erosion control;

C. Maintenance of plant materials identified to be rare or essential to the well-being of rare animals;

D. Watering of livestock; and

E. Public works projects and actively irrigated environmental mitigation projects.

2. At the discretion of the General Manger, the District may shut off or lock irrigation meters without customer notification.

SECTION 10.0 PROCEDURES FOR DETERMINATION AND NOTIFICATION OF LEVEL OF ACTION

(a) Level 1 under this Program applies at all times unless the District Board of Directors has declared another Level, per the procedures set forth in this section. The District shall, at a minimum, provide notice of a Level 1 declaration and condition by news release and by posting information on the District's website.

(b) The existence of a Level 2 or Level 3 may be declared by resolution of the District Board of Directors adopted at a regular or special public meeting held in accordance with State law. The mandatory conservation measures applicable to Level 2 or Level 3 shall take effect on the tenth day after the date the response level is declared. Within five days following the declaration of the level, the District shall publish a copy of the resolution in a newspaper used for publication of official notices.

(c) The existence of Level 4, 5 or 6 may be declared in accordance with the procedures specified in California Water Code sections 351 and 352. The mandatory conservation measures applicable to Levels 4 through 6 shall take effect on the tenth day after the date the response level is declared. Within five days following the declaration of the level, the District shall publish a copy of the resolution in a newspaper used for publication of official notices. If the District establishes a water allocation, it shall provide notice of the allocation by including it in the regular billing statement for the fee or charge or by any other mailing to the address to which the District customarily mails the billing statement for fees or charges for on-going water service. Water allocation shall be effective on the fifth day following the date of mailing or at such later date as specified in the notice.

(d) The District Board of Directors may declare an end to a level by the adoption of a resolution at any regular or special meeting held in accordance with State law.

(e) The District shall notify customers of any changes in levels or water use restrictions using multiple communication methods.

SECTION 11.0 NON-COMPLIANCE AND FEES

(a) Any person, who uses, causes to be used, or permits the use of water in violation of this resolution is guilty of an offense punishable as provided herein.

(b) Each day that a violation of this resolution occurs is a separate offense.

(c) Water Conservation Fees, as set forth in Section 4.4.17 of the District's Rules and Regulations, may be levied for each violation of a provision of this resolution as follows:

1. A first violation of any provision of this resolution shall result in a letter of warning.

2. A second violation of any provision of this resolution within one year shall result in the assessment of a Water Conservation Fee.

3. A third violation of this resolution within one year shall result in the assessment of an additional Water Conservation Fee.

4. Four or more violations of any provision of this resolution shall result in the assessment of additional Water Conservation Fees.

(d) Violation of a provision of this resolution is subject to enforcement through installation of a flow-restricting device in the meter. The cost of installing and removing a flow-restricting device will be paid for by the person, who uses, causes to be used, or permits the use of water in violation of this resolution.

(e) Each violation of this resolution may be prosecuted as a misdemeanor punishable by imprisonment in the county jail for not more than 30 days or by a fine not exceeding $1,000, or by both as provided in Water Code section 377.

(f) Willful violations of the mandatory conservation measures and water use restrictions as set forth in Sections 7.0, 8.0 and 9.0 and applicable during Levels 4 through 6 may be enforced by discontinuing service to the property at which the violation occurs as provided by Water Code section 356. The cost of disconnecting and re-connecting water service be paid for by the person, who uses, causes to be used, or permits the use of water in violation of this resolution.

(g) All fees and costs associated with installing and removing a flow-restricting device and disconnecting and re-connecting water service will be added to the account of the person, who uses, causes to be used, or permits the use of water in violation of this resolution. Fees and costs will appear on and be payable with the first billing statement for the period the violation occurred and be subject to the same remedies that are imposed by the District for failure to pay other charges.

(h) All remedies provided for herein shall be cumulative and not exclusive.

SECTION 12.0 APPEALS

(a) Any person complaining about fees and/or other remedies applied in accordance with Section 11 of this resolution shall have that complaint be first taken up with the General Manager before any action will be taken by the District's Board of Directors.

(b) The General Manager's determination may be appealed in writing within 10 days of the mailing of a notice of determination. Any determination not timely appealed shall be final.

(c) The person appealing the General Manager's determination shall submit a written request to the Board Secretary to have his or her appeal considered as an item for discussion and action at an upcoming Board meeting. The written request shall include: 1) a description of the issues, 2) evidence supporting the claim, and 3) a request for resolution of the dispute.

(d) The District shall at least 10 days before the date of the hearing mail an appropriate notice of the regular or special meeting at which the appeal will be heard. The Board may, in its discretion, affirm, reverse or modify the determination.

ARTICLE TWO: Water Code Section 10632 requires water shortage planning elements contained in a water supplier's Plan also be included in a water supplier's WSCP; this article sets forth those water shortage planning elements.

SECTION 1.0 WATER SUPPLY RELIABILITY ANALYSIS

Pursuant to Water Code Section 10632(a)(1), water suppliers are to provide a concise narrative summarizing the supplier's water reliability analysis in Chapter 7 of its 2025 Plan. The District has several water sources including both purchased and local water supplies. Purchased water supplies are conveyed to the District by Metropolitan and/or the Water Authority and may be derived from sources developed by either of those two agencies or through the auspices of the United States Department of the Interior, Bureau of Reclamation (Reclamation). Supplemental Water is supplied under the terms of the San Luis Rey Indian Water Rights Settlement Act, 16,000 AF/YR of water conserved from the lining of the All American Canal and its Coachella Branch is

furnished by Reclamation for the benefit of the San Luis Rey Settlement Parties (Settlement Parties consist of the Bands – the La Jolla, Rincon, San Pasqual, Pauma, and Pala Bands of Mission Indians – and the Local Entities – the City of Escondido and the District). Per the Settlement Act, Supplemental Water may only be used by the Bands on their reservations or by the Local Entities in their service areas. Local water supply is managed as a surface water source from Lake Henshaw and the San Luis Rey River; the District augments the natural runoff into Lake Henshaw with groundwater that is pumped into the lake from the Warner Valley Basin. Chapter 6 of the District's 2025 Plan provides details on the District's water sources and reliability of each of its sources.

To the extent that local water and Supplemental Water supplies are insufficient to meet its total water needs for any given year, the District relies on Water Authority supplies to make up the difference. Based on information contained in the Water Authority's 2025 Plan, it is anticipated that the Water Authority will be able to meet the District's increased demands during a single-dry water year and multiple-dry water year scenarios. Information regarding the reliability and vulnerability of the Water Authority's and Metropolitan's water supplies can be found in each agency's 2025 Plan.

SECTION 2.0 ANNUAL WATER SUPPLY AND DEMAND ASSESSMENT PROCEDURES

Pursuant to Water Code Section 10632.1, water suppliers will be required to submit a water supply and demand assessment report (Annual Assessment) to DWR on or before July 1st of each year. The Annual Assessment will be used to evaluate short-term water supply reliability for the upcoming fiscal year and will discuss the District's existing and projected water supply sources, unconstrained customer demand and planned water use for the current year assuming that the following year will be dry.

The District will perform its Annual Assessment in the spring each year to assess short-term reliability for the upcoming fiscal year. Results of the analysis will be inform the District's WSRP level. Because the District purchases water from the Water Authority, the District's Annual Assessment will be conducted in coordination with the Water Authority's Annual Assessment. As such, the timeline for conducting the Annual Assessment has been based on the Water Authority's timeline. The District's timeline for developing its Annual Assessment is presented in Table 2-1.

Table 2-1: Annual Assessment Process and Timeline

Time Frame	Step	Action
March – April	1(a)	District estimates available local supplies.
	1(b)	District coordinates with the Water Authority to gather necessary information for the Authority to conduct its wholesaler assessment.
April – May	2(a)	The Water Authority announces member agency allocation determination for current year.
	2(b)	The Water Authority determines carryover (and emergency storage apportionments if under emergency).
	2(c)	District conducts its Annual Assessment:
	(i)	District determines total available supply – inclusive of imported water supply.
	(ii)	District determines infrastructure constraints (including water quality conditions limiting local sources).
	(iii)	District determines expected demand for current year and one subsequent dry year, anticipated to be based on regional projections from the Water Authority .
	(iv)	District compares supply and demand and makes a determination of water supply reliability.
June	3(a)	District coordinates with the Water Authority on submittal of the report. Annual Assessment report to be submitted to the state by July 1.

SECTION 3.0 SIX STANDARD WATER SHORTAGE LEVELS AND RESPONSE ACTIONS & SEISMIC RISK ASSESSMENT AND MITIGATION PLAN

Pursuant to Water Code sections 10632(a)(3) and 10632(a)(4), the District must include six standard water shortage levels and response actions correspond to normal conditions to progressively increasing estimated shortage conditions (up to 10-, 20-, 30-, 40-, 50-percent, and greater than 50% shortage compared to the normal reliability condition). These shortage levels and corresponding actions can be found in sections 4-10 of the District's WSRP.

Water Code Section 10632.5 requires an urban water supplier to include within its Plan a seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a water system and mitigate those vulnerabilities. Pursuant to Water Code Section 10632.5(c), an urban water supplier may comply with this requirement by submitting a copy of the most recently adopted multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000 (Public Law 106-390) if the multi-hazard mitigation plan addresses seismic risk. Appendix F of the District's 2025 Plan contains the District's Hazard Mitigation Plan which includes sections addressing seismic risk assessment and mitigation.

SECTION 4.0 COMMUNICATION PROTOCOLS

Water Code Section 10632 requires every urban water supplier to establish communication protocols to inform the public of water shortages and water shortage actions. Upon a water shortage declaration action by the General Manager, the District will expand its public information campaign to notify the public of the water shortage rules and regulations. If possible, the District would activate

a public information campaign prior to a formal water shortage declaration to provide customers with as much advance notice as possible. The District would issue a news release and would continually update its webpage to notify residents of current and planned shortages. Additionally, the District could direct mail a copy of the water shortage rules and regulations to its customers.

SECTION 5.0 COMPLIANCE AND ENFORCEMENT

Pursuant to Water Code 10632(a)(6), retail suppliers must include an element that describes how they will ensure compliance with and enforce provisions of the WSCP. In the District's WSRP, Sections 11 and 12 establish customer compliance, enforcement and appeal procedures.

SECTION 6.0 LEGAL AUTHORITIES

The District has the legal authority to implement and enforce its WSCP. California Constitution Article 10, Section 2 states that the water resources of the State be put to beneficial use to the fullest extent of which they are capable and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare. Sections of Water Code Chapter 3 commencing with Section 350 of Division 1, provide the authority for the governing body of a water agency to declare a water shortage and to adopt and enforce water conservation restrictions.

SECTION 7.0 FINANCIAL CONSEQUENCES

In the event of the District implementing a WSCP response action, appropriate conservation measures would go into effect and the District would be operating with reduced water sales. The amount of decreased water sales would depend on the WSCP response level and any additional state mandatory restrictions.

The District maintains several reserve funds including the Working Capital Reserve. The Working Capital Reserve is to protect the District's ability to have enough funds to meet its most basic and common financial obligations against operating revenue and expense variances such as reduced water sales and/or increased operating expenses. This reserve could be used to offset reduced sales or increased expenses. In addition to this reserve, the District has a comprehensive budget development process and rate modeling capabilities that enable the District to effectively balance revenue and expenditure requirements. The District also undertakes a comprehensive cost-of-service process every four to five years to ensure the water rates are sufficient to meet operational, capital and reserve needs.

SECTION 8.0 MONITORING AND REPORTING

Pursuant to Water Code Section 10632(a)(9), the District will monitor and report on implementation of their WSCP during a shortage action. The methods for determining actual water use reductions are implemented on an ongoing basis. All water received, local and purchased, is metered and monitored; additionally, the District has meters in place that measure and record the water used by each connection within its service area. When water use restrictions are in place,

and specifically when water cutbacks have been implemented, the District closely monitors water use to ensure compliance with restrictions and that the District is meeting its necessary consumer demand reductions. Because the District collects water use data on a regularly scheduled basis, it can calculate a baseline to compare to current water use during times of drought, which can then be used to estimate actual reductions in water use.

SECTION 9.0 WSCP REFINEMENT PROCEDURES

Pursuant to Water Code Section 10632(a)(10), the District will reevaluate and improve procedures for systematically monitoring and evaluating the functionality of the WSCP in order to ensure shortage risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented as needed.

The WSRP is a living document that has been and will be refined to be responsive to the effectiveness of conservation measures during a water shortage. The District will analyze monthly monitoring data to determine if adaptive measures need to be taken to achieve the necessary shortage reduction amounts. In the event that measures are not working as desired, the District may modify actions or refine current actions to achieve greater savings.

ARTICLE THREE: This resolution shall take effect immediately upon adoption or as otherwise established by State law for Vista Irrigation District.

PASSED AND ADOPTED by the following roll call vote of the Board of Directors of Vista Irrigation District this 17th day of June, 2026:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
Marty Miller, President

ATTEST:

_____
Ramae Ogilvie, Secretary
Board of Directors
Vista Irrigation District

APPENDIX E

Reporting on Reduced Delta Reliance

Vista Irrigation District

Reporting on Reduced Delta Reliance

BACKGROUND

An urban water supplier that anticipates participating in or receiving water supply benefits from a proposed project (covered action) such as a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta) should provide information in their Urban Water Management Plans (UWMP's) beginning in 2015 that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, *Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance* (California Code Reg., Title 23, Section 5003).

VISTA IRRIGATION DISTRICT DELTA RELIANCE

The District is a secondary system and primarily relies on regional water wholesalers, Metropolitan and the Water Authority for long-term water supply planning. The District receives potable water purchased from the Water Authority. The Water Authority imports State Water Project (SWP) water from Metropolitan Water District of Southern California (Metropolitan), among other imported and local supplies. The District's reliance on the Bay Delta originates from its water supply delivered by the Water Authority via Metropolitan.

WATER AUTHORITY REDUCED DELTA RELIANCE ANALYSIS

The Water Authority completed a Delta Reliance analysis as part of the Water Authority's 2025 Urban Water Management Plan (2025 Plan). As the District's only potential source of water from the Delta watershed is water purchased from the Water Authority, the District relies on the Water Authority's Delta reliance analysis to demonstrate reduced regional reliance on the Delta.

The Water Authority's information on its reduced reliance on the Delta is documented below (the analysis is in draft form until the Water Authority Board of Directors adopts their 2025 Plan) and can be used in future certifications of consistency with WR P1 for potential future water supply covered actions in the Delta.

Reporting on Reduced Delta Reliance

Background

An urban water supplier that anticipates participating in or receiving water from a proposed project, such as a multiyear water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta), should provide information in their 2025 UWMPs that can then be used in the certification of consistency process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Regulations, Title 23, §5003).

Delta Plan Policy WR P1 is one of fourteen regulatory policies in the Delta Plan. The Delta Plan is a comprehensive, long-term, legally enforceable plan guiding how federal, state, and local agencies manage the Delta's water and environmental resources. The Delta Plan was adopted in 2013 by the Delta Stewardship Council (DSC). Delta Plan Policy WR P1 identifies urban water management plans (UWMP) as the tool to demonstrate consistency with the state policy that suppliers that carry out or take part in covered actions must reduce their reliance on the Delta.

The California Code of Regulations, Title 23, § 5003(c)(1), states that commencing in 2015, water suppliers that have done all of the following are contributing to reduced reliance on the Delta and improving regional self-reliance and are therefore consistent with Delta Plan Policy WR P1:

(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;

(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and

(C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

The Water Authority's information on its reduced reliance on the Delta is documented below and can be used in future certifications of consistency with WR P1 for potential future water supply covered actions in the Delta.

Summary of Expected Outcomes for Reduced Reliance on the Delta

As stated in WR P1 (c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta.

The expected outcomes for the Water Authority's regional self-reliance were developed using the approach and guidance described in Appendix C of DWR's Urban Water Management Plan Guidebook 2025 –Final (Guidebook Appendix C) issued in January 2026. The data used in this analysis represent the total regional efforts of Metropolitan, the Water Authority, and its member agencies and were developed in conjunction with Metropolitan as part of the UWMP coordination process.

The following provides a summary of the near-term (2030) and long-term (2050) expected outcomes for SDCWA's Delta reliance and regional self-reliance. The results show that as a region, the Water Authority, Metropolitan, and its member agencies are measurably reducing reliance on the Delta and improving regional self-reliance, both as an amount of water used and as a percentage of water used.

Expected Outcomes for Regional Self-Reliance for the Water Authority:

> Near-term (2030) – Normal water year regional self-reliance is expected to increase by 509 TAF from the 2010 baseline; this represents an increase of about 69 percent of 2030 normal water year retail demands (Table 3).
>
> Long-term (2050) – Normal water year regional self-reliance is expected to increase by nearly 573 TAF from the 2010 baseline, this represents an increase of about 75 percent of 2050 normal water year retail demands (Table 3).

Process to Demonstrate Reduced Reliance on Delta

Consistent with Appendix C in the California Department of Water Resource's Draft UWMP Guidebook 2025 (DWR Guidebook), the analysis followed Steps 1 through 4 in the DWR Guidebook to document consistency with WR P1 and produce data and information covering the Water Authority's 2025 UWMPs. A list of Steps 1 through 4 is shown below.

1) Quantify the water use efficiency supply volume;
2) Quantify total water supplies;
3) Quantify water supplies that contribute to regional self-reliance; and
4) Demonstrate reduced reliance on water supplies from the Delta watershed.

Unless otherwise noted, the sources of the data used in the analysis are shown in Table 1. All data were obtained from the current 2025 UWMP or previously adopted UWMPs and represent average or normal water year conditions. Additionally, all analyses were conducted at the service area level, and all data reflect the total contributions of the Water Authority and its member agencies in conjunction with information provided by Metropolitan.

Table 1 – Source of Water Supply Data

Analysis Year	Data Source	
2010 (Baseline)	2005 UWMP	Tables 2-2 and 8-1
2015	2010 UWMP	Tables 2-5 and 9-1
2020	2015 UWMP	Tables 2-4 and 9-1
2025	2020 UWMP	Tables 2-4 and 9-1
2030, 2035, 2040, 2050	2025 UWMP	Tables 2-4 and 9-1

Quantification of Total Water Supplies

To demonstrate reduced reliance on the Delta, the Water Authority compared its projected Delta water use against a baseline. The baseline, shown in Table 2, was calculated by taking the projected 2010 normal year water demand and adding projected water efficiency savings for 2010. Consistent with DWR's Guidebook, normal year water demands were used as a surrogate for normal year water supplies to help alleviate issues associated with instances where available water supplies exceed normal year water demands. In addition, consistent with the DWR Guidebook, actual water use was not used for the current year due to the influence of weather and other variables on water use. Rather, UWMP normal year demand projections were used to represent current and future water use.

Table 2 – Service Area Water Demands with Water Use Efficiency

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	708,990	647,285	587,581	555,758	451,881	458,877	467,629	470,890	475,176
Non-Potable Water Demands	33,668	38,660	40,459	41,936	33,058	33,314	33,553	33,723	38,903
Potable Service Area Demands with Water Use Efficiency Accounted For	675,322	608,625	547,122	513,822	418,823	425,563	434,076	437,167	436,273

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Population	3,113,498	3,271,773	3,340,594	3,442,340	3,207,802	3,264,258	3,293,723	3,279,039	3,264,357

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Per Capita Water Use (GPCD)	194	166	146	133	117	116	118	119	119
Change in Per Capita Water Use from Baseline (GPCD)		(28)	(47)	(60)	(77)	(77)	(76)	(75)	(74)
Estimated Water Use Efficiency Since Baseline		101,027	177,457	232,826	276,954	282,459	280,337	274,061	271,771

Quantification of Water Supplies that Contribute to Regional Self-Reliance

For a covered action to demonstrate consistency with the Delta Plan, WR P1 subsection (c)(1)(C) states that water suppliers must report in their UWMP the expected outcome for measurable improvement in regional self-reliance as a reduction in water used from the Delta watershed. To determine whether there is an increase in regional self-reliance, the baseline calculated in Table 2 is used to compare against the water supplies listed in Table 3 that contribute to regional self-reliance. The comparison is done over five-year periods, from 2015 through 2050, to calculate how regional self-reliance will change over time.

Table 3 lists the sources of water supplies and volumes that contribute to regional self-reliance. As shown in the table, the Water Authority's reliance on the Delta watershed decreases over time as the percent of water supplies that contribute to regional self-reliance increase over time. The volumes of the individual supplies that contribute to regional self-reliance can be found in Section 8 of the Water Authority's 2005 UWMP, and Section 9 of the Water Authority's 2010, 2015, 2020, and 2025 UWMPs.

The water supplies included in Table 3 that contribute to regional self-reliance are grouped into categories that are consistent with the DWR Guidebook and represent Water Authority and member agency verifiable supplies. Recycled water supplies are listed in the "Water Recycling" category. Water supplies from the Carlsbad Desalination Plant are listed in the "Advanced Water Technologies" category. The remaining water supplies are included in the "Local and Regional Water Supply and Storage Projects" category, and consist of water supplies from the Imperial Irrigation District water transfer, All-American and Coachella Canal lining projects, groundwater, brackish groundwater, surface water, potable reuse, and San Luis Rey water transfers. Since supplies from the Metropolitan Water District of Southern California (Metropolitan) may include a percentage of water from the Delta watershed, Metropolitan supplies are excluded from the list of supplies that contribute to regional self-reliance in the San Diego region.

Table 3 – Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Use Efficiency	-	101,027	177,457	232,826	276,954	282,459	280,337	274,061	271,771
Water Recycling	33,668	38,660	40,459	41,963	33,058	33,314	33,553	33,723	38,903
Stormwater Capture and Use									
Advanced Water Technologies	-	-	97,842	89,042	97,842	158,882	158,882	160,562	160,562
Conjunctive Use Projects									
Local and Regional Water Supply and Storage Projects	235,924	250,436	351,820	368,757	371,229	373,096	374,780	371,280	371,280
Other Programs and Projects the Contribute to Regional Self-Reliance									
Water Supplies Contributing to Regional Self-Reliance	269,592	390,123	667,578	732,588	779,083	847,751	847,552	839,626	842,516

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	708,990	748,312	765,038	788,584	728,835	741,336	747,966	744,951	746,947

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies Contributing to Regional Self-Reliance	269,592	390,123	667,578	732,588	779,083	847,751	847,552	839,626	842,516
Change in Water Supplies Contributing to Regional Self-Reliance		120,531	397,986	462,996	509,491	578,159	577,960	570,034	572,924

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	38.0%	52.1%	87.3%	92.9%	106.9%	114.4%	113.3%	112.7%	112.8%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		14.1%	49.2%	54.9%	68.9%	76.3%	75.3%	74.7%	74.8%

Demonstration of Reduced Reliance on Water Supplies from the Delta Watershed

Metropolitan's service area as a whole, reduces reliance on the Delta through investments in non-Delta water supplies, local water supplies and demand management measures.

Quantifying the Water Authority's and its member agencies investments in self-reliance, locally, regionally, and throughout Southern California is infeasible for the reasons as noted below. Due to the regional nature of these investments, the Water Authority is relying on Metropolitan's regional accounting of measurable reductions in supplies from the Delta Watershed. The results shown in Table 4 demonstrate that Metropolitan's service area, including the Water Authority and its member agencies, is measurably reducing its Delta reliance. In the near-term (2030), the expected outcome for normal water year reliance on supplies from the Delta watershed decreased by 466 TAF from the 2010 baseline; this represents a decrease of 6 percent of 2030 normal water year retail demands. In the long-term (2050), normal water year reliance on supplies from the Delta watershed decreased by 537 TAF from the 2010 baseline; this represents a decrease of just over 9 percent of 2050 normal water year retail demands.

Table 4 – Calculation of Reliance on Water Supplies from Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
CVP/SWP Contract Supplies	1,472,000	1,029,000	984,000	1,133,000	949,000	924,000	901,000	877,000	877,000
Delta/Delta Tributary Diversions	-	-	-	-	-	-	-	-	-
Transfers and Exchanges of Supplies from the Delta Watershed	20,000	44,000	91,000	58,000	77,000	77,000	78,000	78,000	78,000
Other Water Supplies from the Delta Watershed	-	-	-	-	-	-	-	-	-
Total Water Supplies from the Delta Watershed	**1,492,000**	**1,073,000**	**1,075,000**	**1,191,000**	**1,026,000**	**1,001,000**	**979,000**	**955,000**	**955,000**

Service Area Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Demands without Water Use Efficiency Accounted For	5,493,000	5,499,000	5,219,000	4,925,000	4,969,000	5,102,000	5,209,000	5,302,000	5,391,000

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Water Supplies from the Delta Watershed	1,492,000	1,073,000	1,075,000	1,191,000	1,026,000	1,001,000	979,000	955,000	955,000
Change in Supplies from the Delta Watershed	**NA**	**(419,000)**	**(417,000)**	**(301,000)**	**(466,000)**	**(491,000)**	**(513,000)**	**(537,000)**	**(537,000)**

Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Percent of Supplies from the Delta Watershed	27.2%	19.5%	20.6%	24.2%	20.6%	19.6%	18.8%	18.0%	17.7%
Change in Percent of Supplies from the Delta Watershed	**NA**	**-7.6%**	**-6.6%**	**-3.0%**	**-6.5%**	**-7.5%**	**-8.4%**	**-9.1%**	**-9.4%**

Metropolitan Member and Sub-Member Agency Infeasibility of Accounting Supplies from the Delta Watershed

Metropolitan's member agencies, including the Water Authority and its member agencies, individually contribute to reduced reliance on the Delta in two ways. First, through the development of local projects and demand management measures in their own service areas, and second through their investments in regional projects and programs through Metropolitan. Regional investments are funded through revenues from water purchases from Metropolitan or one or more of its member agencies.

Metropolitan uses a portion of revenues from those purchases to fund projects and programs that contribute to the region's reduced reliance on Delta water supplies. Because some or all of these regional investments may not be constructed or implemented directly in a particular water supplier's service area, a water supplier's demands on Metropolitan or one or more of its member agencies will not accurately reflect that water supplier's total contributions to reduced reliance on supplies from the Delta watershed. It infeasible for a water supplier that makes investments in regional projects and programs to quantify its individual contributions to reduced reliance and reflect them properly in its demands on Metropolitan or one or more of Metropolitan's member agencies.

APPENDIX F

Vista Irrigation District
Multi-Jurisdictional Hazard Mitigation Plan (2023)

Multi-Jurisdictional Hazard Mitigation Plan: Vista Irrigation District Annex

San Diego County, California

2023

This page is intentionally left blank.

Table of Contents

1. SECTION ONE: Planning Area and Resources

1.1. Planning Area: Vista Irrigation District

Vista Irrigation District (District) is a Special District formed under the Irrigation District Act of the State of California to provide potable water service to its customers. It is governed by a five member Board of Directors elected by voters to four-year terms.

The District covers an area of approximately 21,200 acres. The service area includes the City of Vista and portions of the cities of Escondido, Oceanside, and San Marcos, and unincorporated areas of San Diego County. The District also owns the 43,402-acre (68 square mile) property housing Lake Henshaw reservoir in Santa Ysabel, roughly 25 miles from the District's central service area.

1.1.1. History

The District was formed in 1923 by local residents pursuant to Section 20500, et. seq., of the California Water Code. In 1946, Vista Irrigation District purchased the San Diego County Water Company, which included the 43,000-acre Warner Ranch that includes Henshaw Dam and Lake Henshaw.

The District, through the Bueno Colorado Municipal Water District, joined the San Diego County Water Authority (Water Authority) and Metropolitan Water District of Southern California (Metropolitan) in 1954 to acquire the right to purchase and distribute imported water throughout its service area. In 1993, the Bueno Colorado Municipal Water District was dissolved and reorganized into Vista Irrigation District and the District then became a member agency of the Water Authority.

The District currently serves roughly 29,000 accounts, the majority of which are residential, and a population of roughly 133,000.

1.1.2. District Infrastructure and Characteristics

The District has both local and purchased water supplies. The District purchases water supply from the Water Authority, which contains a blend of desalinated water from the Claude "Bud" Lewis Carlsbad Desalination Plant and imported water from northern California and the Colorado River, via Metropolitan. The District's local water supply, which is derived from surface water runoff in the San Luis Rey River Watershed and pumped groundwater from the Warner Wellfield, comes from Lake Henshaw. Local water is treated at the Escondido-Vista Water Treatment Plant, which the District jointly owns with the City of Escondido, and then conveyed via the Vista Flume to the Twin Oaks Valley area and the District's Pechstein Reservoir for distribution.

The District's infrastructure is broken down as follows:

District Distribution and Transmission Facilities

428 miles of pipelines
12 reservoirs (water tanks)
7 pumping stations
Vista Flume (11.25 miles of conduit)
Escondido-Vista Water Treatment Plant (jointly owned with the City of Escondido)

Lake Henshaw Reservoir

51,832 acre feet capacity
2,256 acres in area, 203 square mile watershed
Earthen Dam
12 active production wells and 91,000 feet of conduit
Day use recreation (fishing, boating)

1.1.3. Population, Demographics and Climate

The service area population is approximately 133,000. The median age of the District's population is 34 years. The majority of the population is Hispanic (49%). Whites make up 38%, Asians 5% and African Americans 2%. The remaining 1% of the population are American Indian, Pacific Islander and other races.

1.1.4. Economic Activity

The City of Vista, which constitutes the majority of the District's service area, has experienced considerable growth over the past 20 years, with the addition of over 20,000 new residents and construction of new industrial and commercial development. Although the City is approaching buildout, the population is expected to increase by more than 14,000 residents by 2030. The majority of this growth is anticipated to be accommodated by infill of vacant sites and redevelopment of underutilized sites. There are approximately 1,570 retail outlets in the service area.

1.1.5. Geography & Climate

The geography of the District's service area varies. The western edge of the service area is approximately 5 miles inland from the Pacific Ocean. It extends east another 10 miles to the foothills of the San Marcos Mountains. Elevations range from 300 feet above sea level toward the west and up to 1,000 feet above sea level to the east. Most of the businesses are located in the flatter areas in the center of the service area, and residences populate the surrounding hillsides.

The climate in the District's service area is typical of northern San Diego County - mild, varying from the mean annual maximum temperature of 74 to the mean minimum of 52 degrees Fahrenheit. The average annual rainfall for Vista is approximately 13 inches and occurs primarily from October through April. At Lake Henshaw, the mean annual maximum temperature is 77 and the mean minimum is 40 degrees Fahrenheit. The average annual rainfall is about 25 inches.

1.1.6. Environmental Factors

Undeveloped areas contain natural vegetation consisting of chaparral brushland, oak-sycamore woodland, riparian-woodland, and oak-grass savanna.

1.2. Community Rating System Requirements

As a Special District, the District is not eligible for National Flood Insurance Program (NFIP) coverage nor can it participate in the Community Rating System (CRS), a Federal Emergency Management Agency (FEMA) program that rewards communities that go beyond the minimum standards for floodplain management under the NFIP. For information related to the Community Rating System participation of the cities that fall within the District service area, including the City of Vista, Escondido, Oceanside and San Marcos, see the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan*.

For more information on the NFIP, see http://www.fema.gov/national-flood-insurance-program.

TABLE 1: FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 1.1
CRS REQUIREMENTS MET BY THE SAN DIEGO COUNTY MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN.

Community Rating System (CRS) Planning Steps	Local Mitigation Planning Handbook Tasks (44 CFR Part 201)
Step 1. Organize	**Task 1:** Determine the Planning Area and Resources **Task 2:** Build the Planning Team 44 CFR 201.6(c)(1)
Step 2. Involve the public	**Task 3:** Create an Outreach Strategy 44 CFR 201.6(b)(1)
Step 3. Coordinate	**Task 4:** Review Community Capabilities 44 CFR 201.6(b)(2) & (3)
Step 4. Assess the hazard	**Task 5:** Conduct a Risk Assessment 44 CFR 201.6(c)(2)(i) 44 CFR 201.6(c)(2)(ii) & (iii)
Step 5. Assess the problem	
Step 6. Set goals	**Task 6:** Develop a Mitigation Strategy 44 CFR 201.6(c)(3)(i) 44 CFR 201.6(c)(3)(ii) 44 CFR 201.6(c)(3)(iii)
Step 7. Review possible activities	
Step 8. Draft an action plan	
Step 9. Adopt the plan	**Task 8:** Review and Adopt the Plan 44 CFR 201.6(c)(5)
Step 10. Implement, evaluate, revise	**Task 7:** Keep the Plan Current **Task 9:** Create a Safe and Resilient Community 44 CFR 201.6(c)(4)

Any jurisdiction or special district may participate in the hazard mitigation planning process. However, to request FEMA approval, each of the local jurisdictions must meet all requirements of 44 CFR §201.6. In addition to the requirement for participation in the process, the Federal regulation specifies the following requirements for multi-jurisdictional plans:

- The risk assessment must assess each jurisdiction's risk where they may vary from the risks facing the entire planning area. (44 CFR §201.6(c)(2)(iii))
- There must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan. (44 CFR §201.6(c)(3)(iv))
- Each jurisdiction requesting approval of the plan must document that is has been formally adopted. (44 CFR §201.6(c)(5))

The hazard mitigation plan must clearly list the jurisdictions that participated in the plan and are seeking plan approval. The San Diego County Multi-Jurisdictional Hazard Mitigation Plan and annexes meet all requirements.

Once adopted, this plan will be incorporated into the District's future planning documents. The previous 2018 Multi-Jurisdictional Plan was incorporated into the District's 2020 Urban Water Management Plan.

2. SECTION TWO: Planning Team and Process

2.1. Planning Team

District staff involved in the hazard mitigation planning process, including working with the County of San Diego and local planning partners to develop District goals are identified below.

Randy Whitmann, Director of Engineering

Frank Wolinski, Director of Operations and Field Services

Marlene Kelleher, Director of Administrative Services

Don Smith, Director of Water Resources

Alisa Nichols, Management Analyst

Brian Fisher, IT Supervisor

Sherry Thorpe, Safety and Risk Manager

Don Gordon, Facilities Supervisor

2.2. Planning Process

The goals and objectives were developed by considering the risk assessment findings and reviewing the District's 2017 Potable Water Master Plan, 2020 Water Supply Planning Study, 2020 Urban Water Management Plan, other localized hazard identification and loss/exposure estimates, and an analysis of the District's current capabilities assessment. These preliminary goals, objectives and actions were developed to represent a vision of long-term hazard reduction or enhancement of capabilities.

2.2.1. Planning Meetings

The District Planning Team met on the following dates to discuss core functions, internal deliverables and preparation of the draft the District's Multi-Jurisdictional Hazard Mitigation Plan Annex.

December 29, 2021 | March 21, 2022 | April 7, 2022 | April 19, 2022

District staff also met with the County of San Diego and other plan stakeholders on the following dates to discuss and review plan aspects, FEMA worksheets and deliverables.

December 2, 2021 | May 12, 2022 | November 9, 2022 | November 10, 2022 | November 14, 2022.

3. SECTION THREE: Outreach Strategy

The District has communication protocols and procedures to inform customers, the public and other government entities of any current or predicted water shortages and associated response actions. The District uses a range of printed and electronic materials and other outreach activities to raise awareness of conservation measures available to customers. The District provides water efficiency messaging in newsletters (printed and electronic), water bill messages, on-hold recordings, announcements on the District's website homepage and articles and news releases in local publications to keep the public, constituents and elected officials up-to-date on District activities.

Additionally, as a member of the San Diego County Water Authority (Water Authority), the District communications and water conservation staff attend the Joint Public Information and Conservation Coordinators monthly meeting hosted by the Water Authority for all member agencies. District staff also participates in the Water Authority's Water Agency Emergency Collaborative (WAEC) where regional and local emergency management and communications are discussed. Coordinated regional messaging on water efficiency topics, drought declarations, demand management measures and emergency management are a long-running practice between the Water Authority and member agencies.

Communication during a supply shortage incident or regional disaster is critical to relay information to employees, response partners and critical customers. During a catastrophic event that interrupts potable water service to District customers, the District will follow communication procedures outlined in the District's Emergency Response Plan and coordinate with the Water Authority and County OES if necessary. See Section 4.1.4 of this Annex for more information on District outreach and education capabilities.

See the *San Diego County Multi-Jurisdictional Hazard Mitigation Plan's* Section Three for details about the countywide outreach strategy.

4. SECTION FOUR: District Capabilities

Local mitigation capabilities are existing authorities, policies, programs, and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities, and must be included in a hazard mitigation plan by the planning team.

4.1. Capability Assessment

The planning team identified current District capabilities available for implementing hazard mitigation activities. The Capability Assessment (Assessment) portion of the mitigation plan identifies the four primary types of capabilities for reducing long-term vulnerability through mitigation planning.

- Planning and regulatory
- Administrative and technical
- Financial
- Education and outreach

The Assessment includes a summary of codes, ordinances, and plans already in place associated to hazard mitigation planning as well as departments and their responsibilities associated to implementation of hazard mitigation planning and activities. The legal and regulatory capabilities of the District are shown in Table 4.1.1, which presents the existing ordinances and codes that affect the physical or built environment of the District. Examples of legal and/or regulatory capabilities can include the County of San Diego building codes, state health and safety codes, zoning ordinances, subdivision ordnances, special purpose ordinances, site plan review, general plans, capital improvement plans, emergency response plans, and real estate disclosure plans.

The Assessment identifies administrative and technical capabilities including the identification of staff, personnel, and department resources available to implement the actions identified in the mitigation section of the Plan. The District administrative and technical capabilities are shown in Table 4.1.2.

The Assessment also identifies the District's fiscal capabilities that may be applicable to providing financial resources to implement identified mitigation action items. Financial capabilities are shown in Table 4.1.3. The District's education and outreach strategies to convey information to District customers are shown in Table 4.1.4.

4.1.1. Planning and Regulatory

Planning and regulatory capabilities are the plans, policies, codes, and ordinances that prevent and reduce the impacts of hazards. Table 4.1.1 identifies existing planning documents and regulations related to mitigation efforts within the community. Specific resources reviewed include the District's 2017 Potable Water Master Plan, Capital Improvement Plan, 2020 Urban Water Management Plan, 2020 Water Supply Planning Study, Water Supply Response Program, Emergency Response Plan and Mutual Aid agreements.

TABLE 4.1.1: VISTA IRRIGATION DISTRICT LEGAL AND REGULATORY CAPABILITY. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Regulatory Tools (Ordinances, Codes, and Plans)	Local Authority (Y/N)	Do plans identify hazards and projects to be used in mitigation actions?
Plans		
A. Comprehensive Master Plan	Yes	Potable Water Master Plan (2017). Yes.
B. Capital Improvement Plan	Yes	Mainline Replacement Program – formalized in 1995. Potable Water Master Plan (2017) and follow up studies/structural analyses for individual projects. Water Supply Planning Study/Plan (2020). Yes.
C. Economic Development Plan	N/A	Under the jurisdiction of the cities of Vista and San Marcos, Escondido and Oceanside.
D. Local Emergency Operations Plan	Yes	The District's emergency response is coordinated through the following levels as defined in Title 19 guidelines of the California Code of Regulations: • Field response • Local government • Operational area • Regional • State Additionally the District has the following Emergency Response Plans and Mutual Aid Agreements in place: • Vista Irrigation District Emergency Response Plan (updated in 2020). • Lake Henshaw Emergency Action Plan. • Mutual Aid agreements with State, County of San Diego and San Diego County Water Authority and 23 of its member agencies.
E. Continuity of Operations Plan	Yes	Included in the District Emergency Response Plan as well as Mutual Aid agreements.
F. Transportation Plan	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
G. Stormwater Management Plan	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
H. Community Wildfire Protection Plan	N/A	Note: District does have Wildfire Annex in Emergency Response Plan.
I. Real Estate Disclosure Requirements	No	The District does not have jurisdiction to require real estate disclosures.
J. Other Special Plans (e.g., brownfields, redevelopment, etc.)	Yes	2020 Urban Water Management Plan (updated every 5 years).

TABLE 4.1.1 (CONTINUED): VISTA IRRIGATION DISTRICT LEGAL AND REGULATORY CAPABILITY. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Regulatory Tools (Ordinances, Codes, and Plans)	Local Authority (Y/N)	Do plans identify hazards and projects to be used in mitigation actions?
Building Code, Permitting and Inspections		
K. Building Codes	N/A	Standard Drawings and Specifications (pertaining to water system infrastructure). No official date, revisions made to sections as needed.
L. Building Code Effectiveness Grading Schedule (BCEGS) Score	N/A	Under the jurisdiction of other agencies.
M. Fire Department ISO Rating	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside. The District provides available water system fire flow information to fire departments upon request.
N. Site plan review requirements	Yes	Review and approve all plans for water system improvements
Land Use Planning and Ordinances		
O. Zoning ordinance	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
P. Subdivision ordinance or regulations	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
Q. Special purpose ordinances (floodplain management, storm water management, hillside or steep slope ordinances, hazard setback requirements)	N/A	Under the jurisdiction of other agencies.
R. Growth management ordinances (also called "smart growth" or anti-sprawl programs)	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
S. Flood Insurance rate maps	N/A	Under the jurisdiction of other agencies.
T. Acquisition of land for open space and public recreation areas	No	The District has the ability to use eminent domain for water supply and water system infrastructure purposes only.

4.1.2. Administrative and Technical

Administrative and technical capabilities include staff and their skills and tools that can be used for mitigation planning and implementation of specific mitigation actions and are identified in Table 4.1.2. Specific resources reviewed include those involving technical personnel such as engineers with knowledge of land development and land management practices, engineers and facilities staff trained in construction practices related to building and infrastructure, water resources, distribution and facilities staff with an understanding of natural or manmade hazards, and administrative personnel with financial planning, emergency management, grant writing, water quality and geographic information system (GIS) skills.

TABLE 4.1.2: VISTA IRRIGATION DISTRICT ADMINISTRATIVE AND TECHNICAL CAPACITY. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Administrative and Technical Resources	Y/N	Department/Agency and Position
A. Planner(s) or engineer(s) with knowledge of land development and land management practices	Yes	Fully staffed Engineering Department.
B. Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Yes	Fully staffed Engineering Department.
C. Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Yes	Fully staffed Engineering, Water Resources and GIS departments.
D. Mitigation Planning Committee	Yes	District staff coordinates mitigation planning across departments and with other local agencies within its service area.
E. Maintenance programs to reduce risk (e.g., tree trimming, clearing drainage systems)	Yes	Facilities department responsible for ensuring all District facilities are cleared of brush, debris and maintained to industry standards.
F. Mutual Aid Agreements	Yes	The District is located in the State of California Mutual Aid Region VI and San Diego County Office of Emergency Services is responsible for coordination and regional emergency management. The District is represented at the County OES through the San Diego County Water Authority. The District is a member of CalWARN Southern Region and a signatory to the California Water/Wastewater Agency Response Network WARN 2007 Omnibus Mutual Assistance Agreement. The Water Authority and 23 of its member agencies, including the District, have entered into a Mutual Aid Agreement.

TABLE 4.1.2 (CONTINUED): VISTA IRRIGATION DISTRICT ADMINISTRATIVE AND TECHNICAL CAPACITY. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Staff/Personnel Resources	Y/N	Department/Agency and Position
A. Chief Building Official	N/A	The District Engineering department sets requirements and approves water infrastructure.
B. Floodplain Manager	N/A	Under the jurisdiction of other agencies.
C. Emergency manager	Yes	The District operates under SEMS and NIMS, which are based on the Incident Command System and the Multi-Agency Coordination System. The District has full-time staff with safety and emergency management experience, trained in NIMS/SEMS and authorized to access/represent the District through San Diego County WebEOC.
D. Surveyors	N/A	The District Engineering and Water Resources departments review and approve work performed by surveying consultants.
E. Staff with education or expertise to assess the community's vulnerability to hazards	Yes	The District has full-time staff in various departments with the necessary education and experience to assess risks and hazards with respect to District operations and facilities throughout the District service area, as well as coordination with other agencies.
F. Community Planner	N/A	Under the jurisdiction of the cities of Vista, San Marcos, Escondido and Oceanside.
G. Scientists familiar with the hazards of the community	Yes	The District has an Environmental Laboratory Accreditation Program (ELAP) certified laboratory (Certificate No. 1761). The District's laboratory is accredited for Total coliform, E.coli, and heterotrophic bacteria.
H. Civil Engineer	Yes	Fully staffed Engineering and Water Resources departments.
I. Personnel skilled in GIS	Yes	Fully staffed GIS Department
J. Grant writers	Yes	Administration, Finance, Engineering, Operations.

4.1.3. Financial

Table 4.1.3 shows specific financial and budgetary tools available to the District such as; capital improvements project funding; authority to levy taxes for specific purposes; fees for water; impact fees for homebuyers or developers for new development; ability to incur debt through general obligations bonds; and the Water Rate Stabilization Fund.

TABLE 4.1.3: VISTA IRRIGATION DISTRICT FISCAL CAPABILITY.
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Financial Resources	Accessible or Eligible to Use (Yes/No)	Funding activities and potential to fund future mitigation actions
A. Community Development Block Grants	N/A	
B. Capital improvements project funding	Yes	New facilities and system improvements are funded by water rates. Water rates are increased over time based on the long-range capital improvement plan. Replacement facilities are financed by depreciation and interest on accumulated depreciation. Expanded facilities are funded by developer fees and capacity charges. Items in the long-range capital improvement plan are determined not only by the depreciation schedule, but through a process which assesses a combination of factors including age, condition and the critical nature of the facility. The long-range capital improvement plan spreads projects over several years to maintain a constant level of capital projects to maximize the efficiency of District resources. Funds collected or accumulated in years in which there are no new or expanded facilities are placed into the District's construction reserve account. Funds in the construction reserve account are used to pay for construction projects in years that the costs of construction projects exceed the amount collected from water rates.
C. Authority to levy taxes for specific purposes	Yes	The District can levy assessments (i.e., to pay interest on bonds, etc.) pursuant to California Water Code Sections 25650 – 25725. Special Districts require approval by 2/3 of votes of qualified voters to impose, extend, or increase any special tax and any revenue from the special tax is limited to the purpose or service for which the tax was imposed. California Water Code §20500, et seq., authorizes the District to exercise the power of eminent domain; to fix, revise and collect rates or other charges for the delivery of water, use of facilities or property, or provision of service; and to fix in each fiscal year, a water standby or availability charge on land within the boundaries of the District to which water is made available by the District.

TABLE 4.1.3 (CONTINUED): VISTA IRRIGATION DISTRICT FISCAL CAPABILITY. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Financial Resources	Accessible or Eligible to Use (Yes/No)	Funding activities and potential to fund future mitigation actions
D. Fees for water	Yes	As water rates and fees for Special Districts are regulated by Proposition 218, which amended the California Constitution by adding articles XIII C ("Article XIII C") and XIII D ("Article XIII D"), there are limitations on the ability of special districts to levy and collect existing and future taxes, assessments, and property-related fees and charges.
E. Water Rate Stabilization Fund	Yes	In the event of a prolonged drought and mandatory water use reductions, funds from this reserve could be used to help offset a severe increase in the water rate as a result of decreased water sales. If necessary, the District could also use funds from its Capital Improvement Reserve to stabilize rates.
F. Impact fees for homebuyers or developers for new developments/homes	Yes	Capacity fees are charged for new water meters.
G. Incur debt through general obligation bonds	Yes	The District may issue bonds, borrow money and incur indebtedness. Taxes, assessments, fees, and charges may be pledged to repay bonds or other forms of indebtedness.
H. Incur debt through special tax and revenue bonds	Yes	The District may issue bonds, borrow money and incur indebtedness. Taxes, assessments, fees, and charges may be pledged to repay bonds or other forms of indebtedness.
I. Incur debt through private activity bonds	Yes	The District has the ability to incur debt through private activity bonds.
J. Withhold spending in hazard-prone areas	No	

4.1.4. Education and Outreach

The District has communication protocols and procedures to inform customers, the public, other government entities and the community of any current or predicted water shortages or regional disasters affecting water supply and associated response actions. The District uses a range of printed and electronic materials and other outreach activities to raise awareness of conservation measures available to customers.

As a member agency of the Water Authority, the District also collaborates in regional messaging related to water conservation and emergency management information. Coordinated regional messaging on water efficiency topics, drought declarations, demand management measures and emergency management are a long-running practice between the Water Authority and member agencies.

TABLE 4.1.4: VISTA IRRIGATION DISTRICT EDUCATION AND OUTREACH CAPABILITIES. FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 4.1 DATA.

Program/Organization	Y/N	Could the program/organization help implement future mitigation activities?
A. Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Y	The District can leverage local organizations and groups for messaging purposes.
B. Ongoing public education or information program (e.g., water efficiency and conservation, preparation for water supply emergencies, Water Supply Response Program and drought response)	Y	Information on responsible water use, conservation programs and emergency preparedness on agency website, links to County OES, and/or newsletters.
C. Water Quality and Water Conservation school programs	Y	The District has ongoing educational programs related to water efficiency and conservation.
D. Public-private partnership initiatives addressing water-related issues	N/A	
E. Joint Public Information and Conservation Coordinators (JPIC) monthly meeting.	Y	Information sharing to enhance regional and local water efficiency and drought response communications.
F. Water Agency Emergency Collaborative (WAEC) bi-annual meetings	Y	Information sharing to help develop regional and local emergency management response actions and communications.
How can these capabilities be expanded and improved to reduce risk?		

4.1.5. Ability to Expand Resources

In order to expand internal capabilities to mitigate identified risk, the District may need to rely on outside resources and consultants in the areas of planning and policy, administrative and technical, financial and outreach and education.

As most mitigation efforts focus on infrastructure replacement, the District may need consultants in the areas of planning and policy, administrative, technical and financial to assist in qualifying for various funding sources. These funding sources may include:

Drinking Water State Revolving Fund | Infrastructure State Revolving Fund | Water Infrastructure and Innovation Act | Building Resilient Infrastructure and Communities | WaterSMART Water and Energy Efficiency Grants | Municipal Bonds.

Additionally, the financial and administrative consultant scope may include, but not be limited to:

- Establishing a bond rating for the District.

- Develop a funding portfolio and financial strategy.
- Modeling impacts to rates.
- Design a strategic rate schedule appropriate for funding mitigation efforts.
- Apply for low interest loans and grants.

Public outreach and education is in an integral component of any construction project that involves infrastructure replacement and including consultants in these areas will improve the progression and public view of mitigation projects. Outreach and education explains the rationale behind the project, ensures transparency and builds public support. Tools to facilitate outreach and education may include, but not be limited to:

- Press releases
- Newsletters/Flyers
- Social media
- Surveys
- Website postings
- Public meetings

5. SECTION FIVE: Risk Assessment and Hazard Summary

The planning team conducted a risk assessment to determine the potential impacts of hazards to the people, economy, and built and natural environments of the District service area. The risk assessment provides the foundation for the rest of the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards.

In addition to informing the mitigation strategy, the risk assessment also can be used to supplement the District's emergency preparedness and response priorities, for land use and comprehensive planning, and for decision making by elected officials, city and county departments, businesses, and organizations in the community.

5.1. Hazards Summary

After conducting a risk assessment, the following hazards were identified by the planning team: Earthquake, Wildfire, Power Loss, Drought and Man-Made – Cyberattack. A brief rational for including each of these is included.

- **Earthquake**

  An earthquake is caused by a sudden slip of a fault plane at the earth's surface. The slip releases energy outward from the fault in all directions in the form of seismic waves, which travel through the earth's crust and cause the shaking that is felt during an earthquake. The amount of energy released during an earthquake is expressed as magnitude and is recorded on seismographs. A common magnitude scale is the Richter Scale were the strength of an earthquake is expressed in whole numbers and decimals (e.g., 7.2) Earthquakes can cause structural damage, injury and loss of life, as well as damage vital infrastructure such as water, power, gas and communication systems.

  Geographic extent of this hazard is District-wide. The Rose Canyon fault traverses through the heart of downtown San Diego northward up the coast. Geologists estimate that the Rose Canyon fault is capable of a magnitude 6.9 earthquake and is the biggest earthquake threat to the urban San Diego area. Additionally, the San Andreas Fault system can cause powerful earthquakes as big as magnitude 8.0, which would generate strong shaking levels in the San Diego region. Two other faults, the Elsinore and San Jacinto located in northeastern San Diego County, can also generate moderately sized but potentially damaging earthquakes. The Rose Canyon Fault lies offshore (approximately six miles from offshore portions of the Newport-Inglewood-Rose Canyon fault zone) and is capable of generating an earthquake that could damage above ground and below ground water storage and infrastructure throughout the District. Since the District receives imported water from the

Los Angeles area, earthquake activity along the San Andreas and Elsinore Faults would likely disrupt water delivery to the District.

Figure A-1 depicts the proximity of the District's service area from inactive and active fault lines and **Figure A-2** illustrates the shaking potential.

The District has an Earthquake Annex in its Emergency Response Plan.

Geographic Area: Extensive **Maximum Probable Extent:** Moderate

Probability of Future Events: Occasional **Overall Ranking**: Medium

- ## Wildfire

Wildfires spread by consuming flammable vegetation and can be caused by human activity and natural events such as lightning. Wildfires often occur in forested or other highly vegetated areas; wildfires can be classified as forest, urban, or interface. Wildfire behavior is based on three primary factors: fuel, topography, and weather; all three factors affect the burning qualities and speed that the fire burns as well as the severity and duration.

The majority of the District service area is located in Vista, which has been designated a Local Responsibility Area (LRA) by CAL FIRE. As seen in **Figure A-3**, portions of Vista are located in "Very High Fire Hazard Severity Zones" in LRA as recommended by CAL FIRE. Portions of the District service area, primarily in unincorporated areas, are located in State Responsibility Areas (SRA) that have been designated as Very High Hazard Severity Zone by CAL FIRE. A combined twenty two percent of the District service area is located in "Very High Hazard Severity Zones." Additionally, areas in Carlsbad, San Marcos and Escondido adjacent to the District are also located in Very High Hazard Severity Zones. Areas adjacent to the District service area have been impacted by large wildfire events in 2003, 2007 and 2014.

The seasonal climatic conditions during Southern California's wildfire season that generally runs from May through November create potential threats regarding control and protection against fires in the District. The hot, dry weather typical of this area in summer and fall, coupled with Santa Ana winds and low humidity frequently results in wildfires that could threaten District facilities. Most non-urban District facilities would be susceptible to wildfire because they are situated near open space and areas containing highly flammable, native vegetation. As most of these facilities are below ground in vaults, the overall impact is diminished.

The District has a Wildfire Annex in its Emergency Response Plan.

Geographic Area: Extensive **Maximum Probable Extent:** Moderate

Probability of Future Events: Likely **Overall Ranking**: Medium

- ## Power Loss

Power loss scenarios can vary from a loss of an individual circuit to the entire power grid and can last from minutes to hours or even weeks to months. Power loss scenarios can stem from damage to San Diego Gas & Electric (SDG&E) above or below ground infrastructure such as power poles, transformers and electric lines to planned events such as Public Safety Power Shutoff's (PSPS) and rolling outages. Other power loss scenarios can be caused by other events such as wildfires, earthquakes and cyber/malevolent attacks.

The District's water distribution system is mostly gravity-based and during a small (single circuit) or large (full grid) power outage can initially sustain pressure and continued flow under normal or default conditions. The size, location and duration of the outage will determine the response necessary. Most outages can be responded to as an operational event.

The District has experienced full grid power outages, PSPS's and rolling outages in its service area. In 1996 and 2011, full grid power outages occurred as a result of transmission line failures in parts of the Western Interconnection. Both outages lasted less than 12 hours and required only operational changes to the District's distribution system.

PSPS's occur when extreme weather or fire threaten SDG&E's electrical system. SDG&E typically gives advanced notice before a PSPS event is to occur and notifies its customers when de-energization and restoration takes place. PSPS event duration is highly dependent on weather conditions and SDG&E's ability to inspect overhead lines before re-energizing. Based on the CPUC's Fire-Threat Map (**Figure A-4**) that identifies areas associated with increased risk for utility associated wildfires, only small portions of the Districts service area is located in Tier 2 (elevated) fire-threat area.

Rolling outages occur when extreme heat increases energy demands, and the demand becomes greater than the available energy supply. Theses outages are typically scheduled, last 1-2 hours, and require minimal to no operational changes by the District.

The District has a Power Loss Annex in its Emergency Response Plan.

Geographic Area: Extensive **Maximum Probable Extent:** Moderate

Probability of Future Events: Likely **Overall Ranking:** Medium

- ## Drought

  Drought is a period of abnormally dry weather sufficiently prolonged for the lack of water to cause a serious hydrologic imbalance in the affected area. Droughts can be defined in different subsets: meteorological, hydrological, agricultural and socioeconomic. Drought is a cyclic part of California climate and can occur in winter and summer.

  Historically, roughly 70% of the District's water supply is dependent on imported water delivery from outside sources, which may be subject to state emergency drought declarations and mandatory cutbacks. Groundwater at Lake Henshaw is used to supplement the local water supply whenever surface runoff is insufficient to produce adequate supplies of local water. As the District has access to treated water supplies from the San Diego County Water Authority, including water from the Carlsbad Desalination Plant, its co-owned water treatment plant with the city of Escondido and ground/surface water sources at Lake Henshaw, it is more drought resilient than other water retailers in the region. Additionally, the District has a Water Supply Response Plan to administratively and operationally address drought conditions.

  Currently, the San Diego County region is in a Moderate drought (D1) per the National Drought Mitigation Center – see **Figure A-5**.

  Geographic Area: Significant **Maximum Probable Extent:** Moderate

  Probability of Future Events: Likely **Overall Ranking:** Medium

- ## Man-made – Cyberattacks

  A cyberattack is an assault launched by cybercriminals using one or more computers against single/multiple computers or a network. A cyberattack can maliciously disable computers, steal data or use a breached computer as a launch point for other attacks. Cybercriminals use a variety of methods to lauch cyberattacks including, malware, phishing, ransomware, denial of service and other methods as well as physical attacks.

  According to Check Point Research, in 2021, cyberattacks on corporate networks increased by 50% from 2020. Cyberattacks on utility companies increased 46% percent in the same period.

  The District's business network along with financial, billing, and email systems could be compromised from a cyberattack. An attack on the District's Supervisory Control and Data Acquisition (SCADA) system can also disable

remote monitoring or control of the water distribution system. The impacts of a cyberattack could disrupt business continuity and operations for weeks and even months.

To date, the District has not had a cyberattack or breach of any significance; although, some phishing scams have been successful.

The District has a Cyber Security Annex in its Emergency Response Plan.

Geographic Area: Limited **Maximum Probable Extent:** Severe

Probability of Future Events: Occasional **Overall Ranking:** Medium

TABLE 5.1: VISTA IRRIGATION DISTRICT HAZARD SUMMARY.
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Avalanche	Negligible	Weak	Unlikely	Low
Dam Failure	Negligible	Weak	Unlikely	Low
Drought	Significant	Moderate	Likely	Medium
Earthquake	Extensive	Moderate	Occasional	Medium
Erosion	Limited	Weak	Occasional	Low
Expansive Soils	Negligible	Weak	Unlikely	Low
Extreme Cold	Negligible	Weak	Unlikely	Low
Extreme Heat	Significant	Weak	Occasional	Low
Flood	Limited	Weak	Unlikely	Low
Hail	Limited	Weak	Unlikely	Low
Hurricane	Negligible	Weak	Unlikely	Low
Landslide	Limited	Weak	Unlikely	Low
Lightning	Limited	Weak	Unlikely	Low

TABLE 5.1: VISTA IRRIGATION DISTRICT HAZARD SUMMARY.
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Hazard	Location (Geographic Area Affected)	Maximum Probable Extent (Magnitude/Strength)	Probability of Future Events	Overall Significance Ranking
Sea Level Rise	Negligible	Weak	Unlikely	Low
Severe Wind	Limited	Moderate	Occasional	Low
Severe Winter Weather	Limited	Weak	Unlikely	Low
Storm Surge	Negligible	Weak	Unlikely	Low
Subsidence	Negligible	Weak	Unlikely	Low
Tornado	Negligible	Weak	Unlikely	Low
Tsunami	Negligible	Weak	Unlikely	Low
Wildfire	Extensive	Moderate	Likely	Medium

Definitions for Classifications
Location (Geographic Area Affected)

- **Negligible:** Less than 10 percent of planning area or isolated single-point occurrences.
- **Limited:** 10 to 25 percent of the planning area or limited single-point occurrences.
- **Significant:** 25 to 75 percent of planning area or frequent single-point occurrences.
- **Extensive:** 75 to 100 percent of planning area or consistent single-point occurrences.

Maximum Probable Extent (Magnitude/Strength based on historic events or future probability)

- **Weak:** Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage.
- **Moderate:** Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days.
- **Severe:** Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months.
- **Extreme:** Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions.

TABLE 5.2: HAZARD SCALE INDEX TO DEVELOP HAZARD SUMMARY FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Hazard	Scale / Index	Weak	Moderate	Severe	Extreme
Drought	Palmer Drought Severity Index3	-1.99 to +1.99	-2.00 to -2.99	-3.00 to -3.99	-4.00 and below
Earthquake	Modified Mercalli Scale4	I to IV	V to VII	VII	IX to XII
	Richter Magnitude5	2, 3	4, 5	6	7, 8
Hurricane Wind	Saffir-Simpson Hurricane Wind Scale6	1	2	3	4, 5
Tornado	Fujita Tornado Damage Scale7	F0	F1, F2	F3	F4, F5

Probability of Future Events

- **Unlikely:** Less than 1 percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
- **Occasional:** 1 to 10 percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
- **Likely:** 10 to 90 percent probability of occurrence in the next year or a recurrence interval of 1 to 10 years.
- **Highly Likely:** 90 to 100 percent probability of occurrence in the next year or a recurrence interval of less than 1 year.

Overall Significance

- **Low:** Two or more criteria fall in lower classifications, or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
- **Medium:** The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
- **High:** The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.

- *Cumulative meteorological drought and wet conditions: http://ncdc.noaa.gov/*
- *Earthquake intensity and effect on population and structures: http://earthquake.usgs.gov*
- *Earthquake magnitude as a logarithmic scale, measured by a seismograph: http://earthquake.usgs.gov*
- *Hurricane rating based on sustained wind speed: http://nhc.noaa.gov*
- *Tornado rating based on wind speed and associated damage: http://spc.noaa.gov*

5.2. Potential Hazard Exposure and Loss Estimates

The District reviewed a set of jurisdictional-level hazard maps and data provided by the County of San Diego, including detailed critical facility information and localized potential hazard exposure/loss estimates related to residential, commercial and critical asset/facilities to identify the top hazards threatening the District service area. Potential hazard exposure/loss estimates and are summarized in Table 5.3.

*TABLE 5.3: SUMMARY OF POTENTIAL HAZARD-RELATED EXPOSURE/LOSS IN VISTA DISTRICT SERVICE AREA**
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 5.1 DATA.

Hazard Types		Number of Buildings	Potential Exposure Loss (x $1,000)	Number of Buildings	Potential Exposure Loss (x $1,000)	Number of Facilities	Potential Exposure Loss (x $1,000)
	Exposed Population	Residential		Commercial		Critical Facilities/Infrastructure**	
Dam Failure	33	N/A	N/A	N/A	N/A	N/A	N/A
Earthquake (Annualized Loss - Includes shaking, liquefaction and landslide components)	212	1,319	757,788	680	291,949	1	5,000
100 Year	N/A	N/A	N/A	N/A	N/A	N/A	N/A
500 Year	33,787	1,262	490,413	61	18,443	5	97,273
Rose Canyon Fault	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Floods (Loss)							
100 Year	481	35	13,601	7	2,116	4	22,575
500 Year	818	48	18,653	14	4,233	7	49,238
Rain-Induced Landslide							
Moderate Risk	4,182	5,802	2,254,077	454	137,267	10	394,676
High Risk	1,733	68	26,418	2	604,700	1	2,020
Drought	133,000						
Wildfire/ Structure Fire							
High Fire Hazard	8,960	674	261,916	36	10,885	1	14,101
Very High Fire Hazard	20,066	1,497	581,734	54	16,327	2	79,782

* Data provided by the County of San Diego. The data provided is only applicable to the population, residential and commercial structures, critical facilities and infrastructure that fall within the Vista Irrigation District service area and are not indicative of potential exposure or loss associated with District facilities or within the responsibility of the District. Information is provided as a summary of potential cost impacts to the District service area.

** Critical facilities and infrastructure within the District service area include highways, light rail, bridges, rail stations, oil and gas facilities and schools.

6. SECTION SIX: Mitigation Strategy

The mitigation strategy serves as the long-term blueprint for reducing potential losses identified in the risk assessment. The mitigation strategy describes how the District will accomplish the overall purpose, or mission, of the planning process.

The mitigation strategy is made up of three main required components: mitigation goals, mitigation actions, and an action plan for implementation. These provide the framework to identify, prioritize, and implement actions to reduce risk to hazards.

Mitigation Goals are general guidelines that explain what the District wants to achieve with the plan. Goals are broad policy-type statements that are long-term, and they represent visions for reducing or avoiding losses from the identified hazards.

Mitigation Actions are specific projects and activities that help achieve the goals.

Action Plans describe how the mitigation actions will be implemented, including how those actions will be prioritized, administered, and incorporated into the District's existing planning mechanisms.

6.1. Mitigation Goals

The District has developed the following six mitigation goals for this Hazard Mitigation Plan:

Goal 1. Replace District's main conduit for local water to maintain access to local water supply and reduce dependence on imported water.

Goal 2. Increase system reliability and redundancy through upgrades to aging infrastructure/facilities that have reached the end of their useful life.

Goal 3. Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, and public facilities due to natural hazards (including earthquakes, wildfire and extreme weather).

Goal 4. Reduce the possibility of damage and losses due to power outages.

Goal 5. Reduce the possibility of damage and losses due to cyber-security breaches.

Goal 6. Improve hazard mitigation coordination and communication with federal, state, local and tribal governments.

6.2. Mitigation Actions

A mitigation action is a specific action, project, activity, or process taken to reduce or eliminate long-term risk to people and property from hazards and their impacts. Implementing mitigation actions helps achieve the plan's mission and goals. The actions to reduce vulnerability to threats and hazards form the core of the plan and are a key outcome of the planning process. This Annex details the District planned mitigation action implementations and are shown in Tables 6.1.1 through 6.1.6.

TABLE 6.1.1: VISTA IRRIGATION DISTRICT GOAL 1
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 1: Replace District's main conduit for local water to maintain access to local water supply and reduce dependence on imported water.	
Objective 1.A: Determine the most reliable, affordable, and responsible alignment to replace the existing 11-mile, nearly 100 year old Flume. Mitigation Hazard – Earthquake/Drought.	
Action 1.A.1	Complete Vista Flume Replacement Alignment Study to select a preferred alignment based on various screening criteria including health and regulatory permits, maintaining minimum pressures, engineering and constructability, environmental/geotechnical constraints, overall capital costs, implementation schedule, impacts to local water deliveries, cash flow, and impacts to rates (study underway).
Objective 1.B: Financial planning and securing funding for Flume Replacement Project.	
Action 1.B.1	Research and identify all available local, state, and federal funding sources and opportunities.
Objective 1.C: Design and construct the Flume Replacement Project.	
Action 1.C.1	Complete design and associated environmental and permitting.
Action 1.C.2	Secure necessary funding.
Action 1.C.3	Construct the Flume Replacement Project.

TABLE 6.1.2: VISTA IRRIGATION DISTRICT GOAL 1
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 2: Increase system reliability and redundancy through upgrades to aging infrastructure/facilities that have reached the end of their useful life.	
Objective 2.A: Retire the nearly 100-year old, seismically deficient Cabrillo Circle (E-1) Reservoir. Mitigation Hazard: Earthquake.	
Action 2.A.1	Construct redundant feed from the 752 Pressure Zone to the 565 Pressure Zone, which includes approximately 2,000 feet of new 18-inch pipeline and a flow control/pressure regulating valve.
Action 2.A.2	Demolish the existing E-1 Reservoir.
Objective 2.B: Retire the nearly 100-year old, seismically deficient Summit Terrace (C) Reservoir.	
Action 2.B.1	Construct redundant feed from the 707 Pressure Zone to the 637 Pressure Zone, which includes upsizing approximately 4,500 feet of 4 to 6 inch piping to 10 inch piping and a new flow control/pressure regulating valve.
Action 2.B.2	Demolish the existing, seismically deficient C Reservoir.

Goal 2 (Cont.): Increase system reliability and redundancy through upgrades to aging infrastructure/facilities that have reached the end of their useful life.	
Objective 2.C: Replace the nearly 100-year old, seismically deficient Virginia Place (A) Reservoir. Mitigation Hazard: Earthquake.	
Action 2.C.1	Demolish and replace the existing A Reservoir, increase storage capacity as much as the existing site will allow.
Objective 2.D: Construct new Pechstein II Reservoir to meet system storage requirements and afford operational flexibility to seismically retrofit the existing Pechstein I Reservoir.	
Action 2.D.1	Design, construct, and place into service the new Pechstein II Reservoir.
Action 2.D.2	Design and construct seismic retrofits for existing Pechstein I Reservoir.

TABLE 6.1.3: VISTA IRRIGATION DISTRICT GOAL 1
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 3: Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, due to natural and manmade hazards (includes geological, flooding, wildfire and extreme weather).	
Objective 3.A: Protect existing assets with the highest relative vulnerability to the effects of geological (earthquakes, mudslides and landslides) hazards. Mitigation Hazard: Earthquake/Wildfire/Man-Made – Cyberattacks.	
Action 3.A.1	Replace/update seismic sensors/valves at critical reservoirs and flow control facilities.
Action 3.A.2	Continue monthly Flume inspections to identify any areas of potential slope instability.
Action 3.A.3	Continue to maintain adequate pipeline materials in the District's warehouse.
Action 3.A.4	Update earthquake response actions in Emergency Response Plan (ERP).
Objective 3.B: Protect existing assets with the highest relative vulnerability to the effects of flooding.	
Action 3.B.1	Continue inspection and maintenance of District owned storm drains and culverts.
Action 3.B.2	Consider relocating or replacing water mains in flood prone areas.
Action 3.B.3	Develop inspection program for water mains that traverse creeks, channels or bridges.
Objective 3.C: Protect existing assets with the highest relative vulnerability to the effects of wildfire.	
Action 3.C.1	Continue weed abatement/brush clearing of District property.
Action 3.C.2	Partner with local agencies and promote defensible space efforts.
Action 3.C.3	Update wildfire response actions in ERP.

Goal 3 (Cont.): Reduce the possibility of damage and losses to existing assets, including people, critical facilities/infrastructure, due to natural and manmade hazards (includes geological, flooding, wildfire and extreme weather).	
Objective 3.D: Protect existing assets with the highest relative vulnerability to the effects of manmade hazards.	
Action 3.D.1	Continue to enhance site security at remote facilities based on vulnerability assessments.
Action 3.D.2	Update cyber-security response actions in ERP.

TABLE 6.1.4: VISTA IRRIGATION DISTRICT GOAL 4
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 4: Increase operational resiliency to power outages – unplanned, public safety power shutoffs and rolling outages.	
Objective 4.A: Add ancillary power sources to key facilities and SCADA sites. Mitigation Hazard: Power Loss.	
Action 4.A.1	Add hookups for portable generators at Deodar Reservoir/Pump Station # 4 and E43 Regulator.
Action 4.A.2	Add solar/battery backup system to Pump Station # 3.
Action 4.A.3	Add solar/battery backup system to Elevado (H) Reservoir.
Objective 4.B: Partner with other agencies at shared facilities to develop ancillary power sources that are mutually beneficial.	
Action 4.B.1	Coordinate with the San Diego County Water Authority to provide backup power source to VID3/Plant # 3.
Action 4.B.2	Coordinate with the city of Vista to provide backup power source to E30S flow control facility and Fire Station # 3.
Objective 4.C: Increase operational resiliency at District Headquarters.	
Action 4.C.1	Explore the expansion of the backup generation system to provide power to the entire facility.

TABLE 6.1.5: VISTA IRRIGATION DISTRICT GOAL 5
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 5: Reduce the possibility of damage and losses due to cyber-security breaches	
Objective 5.A: Implement Multifactor Authentication (MFA) on all externally accessible systems. Mitigation Hazard: Man-made – Cyberattacks	
Action 5.A.1	Review all externally available systems and investigate how best to implement MFA. Evaluate various solutions.
Action 5.A.2	Implement MFA and provide training to users.
Objective 5.B: Improve the District's capability and efficiency at administering pre- and post- disaster mitigation.	
Action 5.B.1	Implement as many pre-incident safeguards as possible. Deploy a robust SIEM solution to get alerts to incidents that traditional AV products may not detect.
Action 5.B.2	Continuously develop and improve the Districts cyber-incident and business continuity plans to create minimal downtime in the event of an incident. Test these plans at least annually.

TABLE 6.1.6: VISTA IRRIGATION DISTRICT GOAL 6
FEMA LOCAL MITIGATION PLANNING HANDBOOK WORKSHEET 6.1 DATA.

Goal 6: Improve hazard mitigation coordination and communication with federal, State, local and tribal governments.	
Objective 6.A: Establish and maintain closer working relationships with state agencies, local, and tribal governments. Mitigation Hazard: Earthquake/Wildfire/Power loss/Drought/Man-made – Cyberattacks.	
Action 6.A.1	Plan, practice, exercise, and operate the District's Emergency Operations Center (EOC) following the National Incident Management System (NIMS), the Standardized Emergency Management System (SEMS), and Incident Command System (ICS).
Action 6.A.2	Encourage further refinement and updating of the District's Emergency Response Plan to coordinate with local agencies and the Countywide Emergency Operations Plan.
Objective 6.B: Improve the District's capability and efficiency at administering pre- and post- disaster mitigation.	
Action 6.B.1	Participate in the development and execution of annual Emergency Operations Center (EOC) tabletop discussions and functional disaster exercises.
Action 6.B.2	Ensure there is always adequate staffing in the EOC and EOC personnel are trained in multiple positions.

6.3. Mitigation Action Plans

Once the comprehensive list of jurisdictional goals, objectives, and action items listed above was developed, the proposed mitigation actions were prioritized. This step resulted in a list of acceptable and realistic actions that address the hazards identified in the District service area. This prioritized list of action items was formed by the planning team weighing STAPLEE criteria.

The Disaster Mitigation Action of 2000 (at 44 CFR Parts 201 and 206) requires the development of an action plan that not only includes prioritized actions but one that includes information on how the prioritized actions will be implemented. Implementation consists of identifying who is responsible for which action, what kind of funding mechanisms and other resources are available or will be pursued, and when the action will be completed.

The top seven prioritized mitigation actions as well as an implementation strategy for each are:

Action Item #1: Complete Vista Flume Replacement Alignment Study.

Coordinating Individual/Organization:	Randy Whitmann/Vista Irrigation District
Potential Funding Source:	Vista Irrigation District CIP Fund/financing and potential federal/state grant funding
Implementation Timeline:	4 years
Hazards Addressed	Earthquake/Drought

Action Item #2: New 565 zone feed to retire Cabrillo Circle (E1) Reservoir.

Coordinating Individual/Organization:	Randy Whitmann/Vista Irrigation District
Potential Funding Source:	Vista Irrigation District CIP Fund/financing and potential federal/state grant funding
Implementation Timeline:	1 year
Hazard Addressed	Earthquake

Action Item #3: New 637 zone feed to retire Summit Terrace (C) Reservoir.

Coordinating Individual/Organization:	Randy Whitmann/Vista Irrigation District
Potential Funding Source:	Vista Irrigation District CIP Fund/financing and potential federal/state grant funding
Implementation Timeline:	1 year
Hazard Addressed	Earthquake

Action Item #4: Virginia Place (A) Reservoir Replacement.

Coordinating Individual/Organization: Randy Whitmann/Vista Irrigation District

Potential Funding Source: Vista Irrigation District CIP Fund/financing and potential federal/state grant funding

Implementation Timeline: 3 years

Hazard Addressed Earthquake

Action Item #5: Construct Pechstein II Reservoir.

Coordinating Individual/Organization: Randy Whitmann/Vista Irrigation District

Potential Funding Source: Vista Irrigation District CIP Fund/financing and potential federal/state grant funding

Implementation Timeline: 3 years

Hazards Addressed Earthquake/Drought

Action Item #6: Deodar Reservoir Roof Replacement.

Coordinating Individual/Organization: Randy Whitmann/Vista Irrigation District

Potential Funding Source: Vista Irrigation District CIP Fund/financing and potential federal/state grant funding

Implementation Timeline: 2 years

Hazard Addressed Earthquake

Action Item #7: Reduce the possibility of damage and losses due to cyber-security breaches.

Coordinating Individual/Organization: Rick Pooley/Vista Irrigation District

Potential Funding Source: Vista Irrigation District General Fund

Implementation Timeline: 1 year

Hazard Addressed Man-made – Cyberattacks

7. SECTION SEVEN: Implementation Progress

Hazard Mitigation Plan maintenance is the process the planning team has established to track the plan's implementation progress and to inform the plan update. The planning team, comprised of Division Heads, will meet annually with a coordination team (the District's Management Analyst and Safety and Risk Administrator) that will take the lead by facilitating the maintenance of the plan. These actions will help to:

- Ensure that the mitigation strategy is implemented according to the plan.
- Provide the foundation for an ongoing mitigation program.
- Standardize long-term monitoring of hazard-related activities.
- Integrate mitigation principles into daily job responsibilities and department roles.
- Maintain momentum through continued engagement and accountability in the plan's progress.

Hazard Mitigation Plan updates provide the opportunity to consider how well the procedures established in the previously approved plan worked and revise them as needed. This Annex is part of the most recent San Diego County Multi-Jurisdictional Hazard Mitigation Plan update. The plan was previously updated in 2018. See the San Diego County Multi-Jurisdictional Hazard Mitigation Plan for more information.

7.1. Mitigation Action Progress

The District's coordination team will track the implementation of the plan annually and update on implementation progress in a five-year cycle.

7.2. Plan Update Evaluation

The District coordination team will use the FEMA Region IX Hazard Mitigation Plan Review Tool to conduct a plan update evaluation in a five-year cycle running concurrently with the San Diego County Multi-Jurisdictional Hazard Mitigation Plan update.

7.2.1. Integration through Existing Programs and Planning Mechanisms

The mitigation action items identified provide the District with a framework for activities that it plans to implemented over the next five years. As the District has other short and long-term planning documents, integrating action items from the hazard mitigation plan into other planning documents will streamline processes and overall align District goals and objectives. Relevant mitigation action items will be incorporated into the following programs and planning documents:

- Urban Water Management Plan
- Capital Improvement Plan
- Potable Water Master Plan
- Mainline Replacement Program
- Emergency Response Plan
- Water Supply Response Program
- Water Rate Study

- Risk and Resilience Assessment

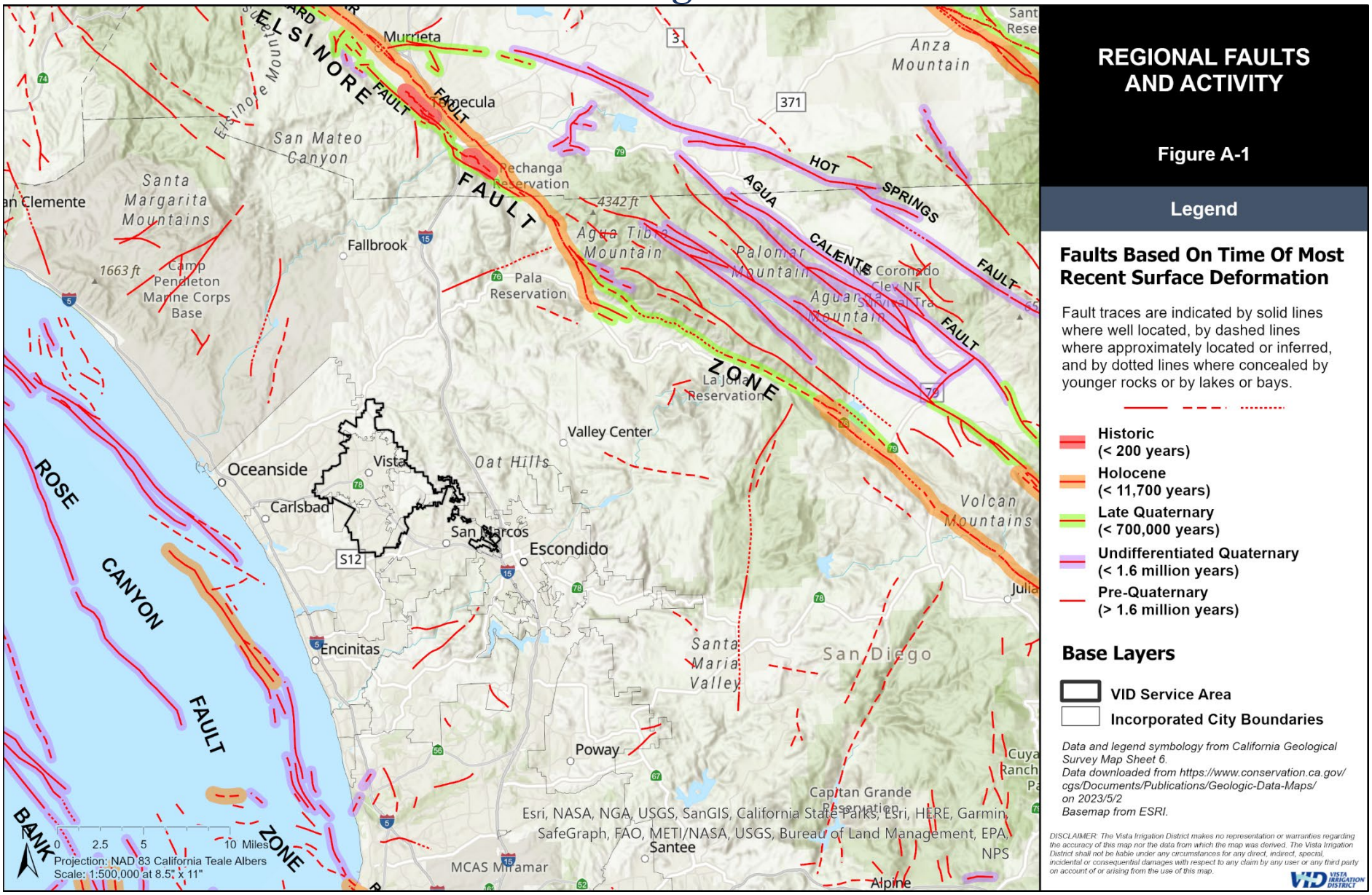
The planning and coordination teams will be responsible for incorporating this hazard mitigation plan into other planning mechanisms at their scheduled update. As most mitigation objectives and goals are infrastructure-related, implementation of these projects can quickly align with the District's Capital Improvement Plan and Mainline Replacement Program. These plans are typically updated on an annual basis; whereas, other plans are updated less frequently.

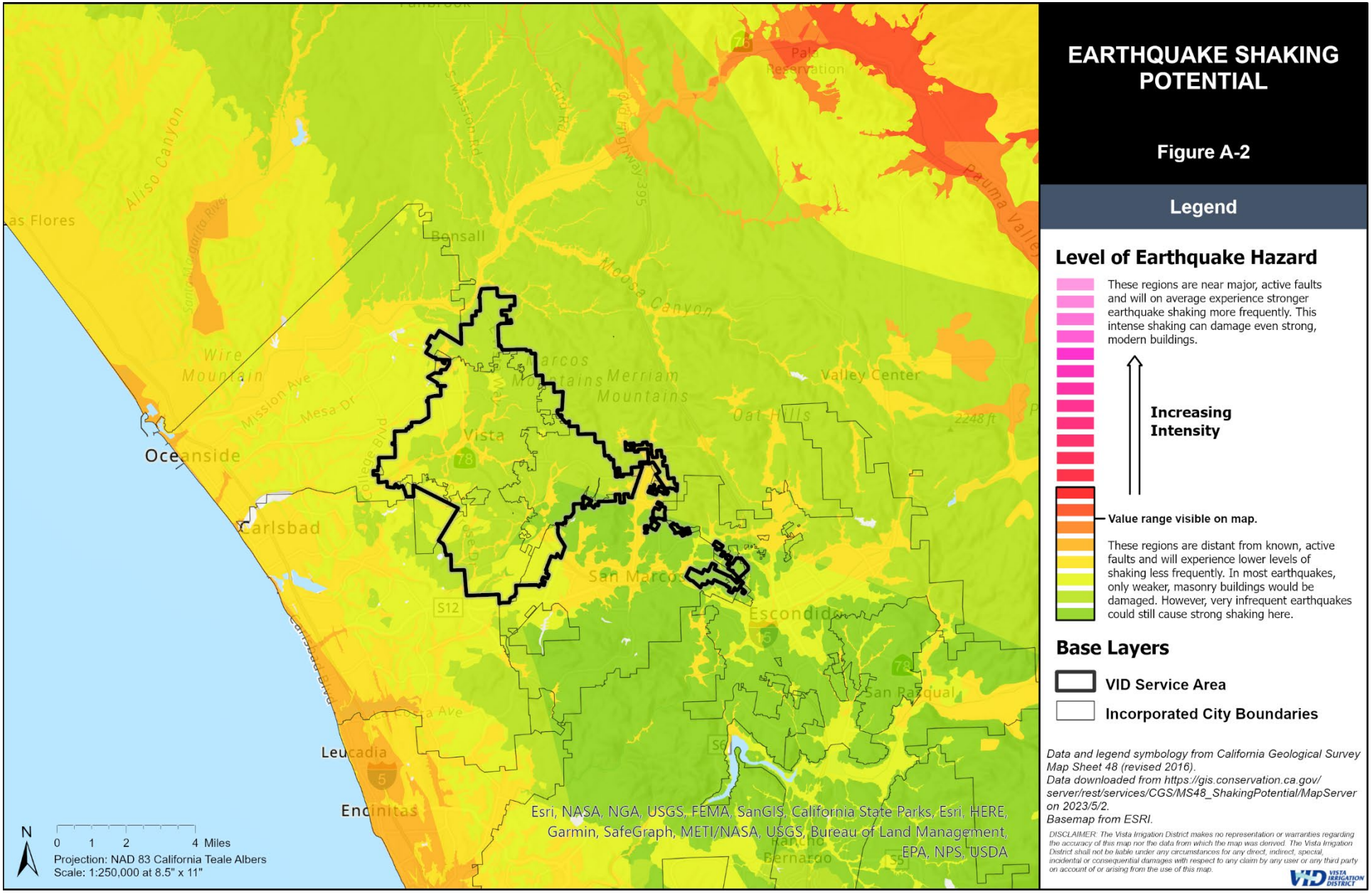
Efforts should continuously be made to monitor the progress of mitigation actions implemented through the aforementioned planning mechanisms and, where appropriate, their priority actions should be incorporated into updates of this hazard mitigation plan.

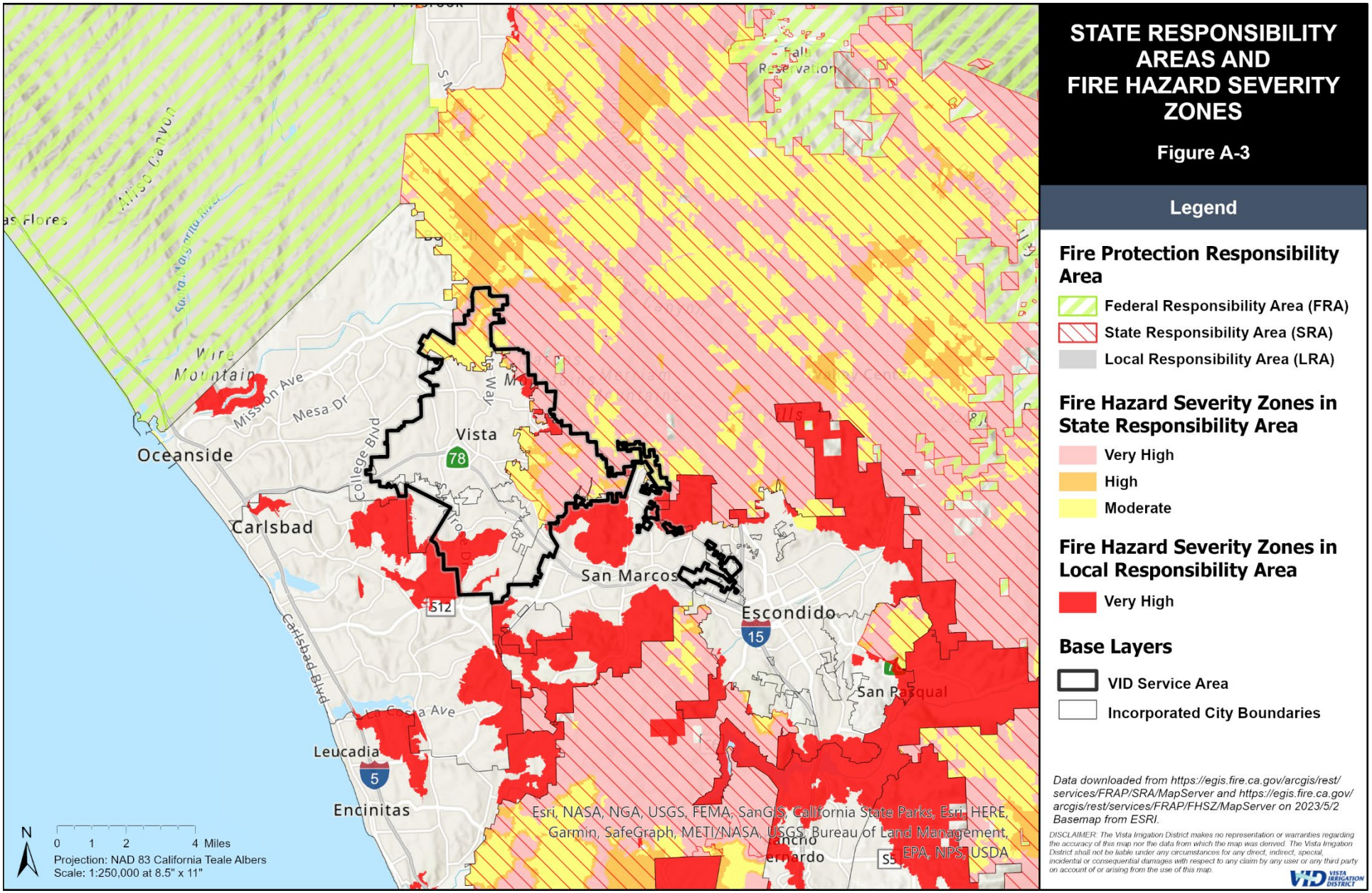
7.3. Point of Contact

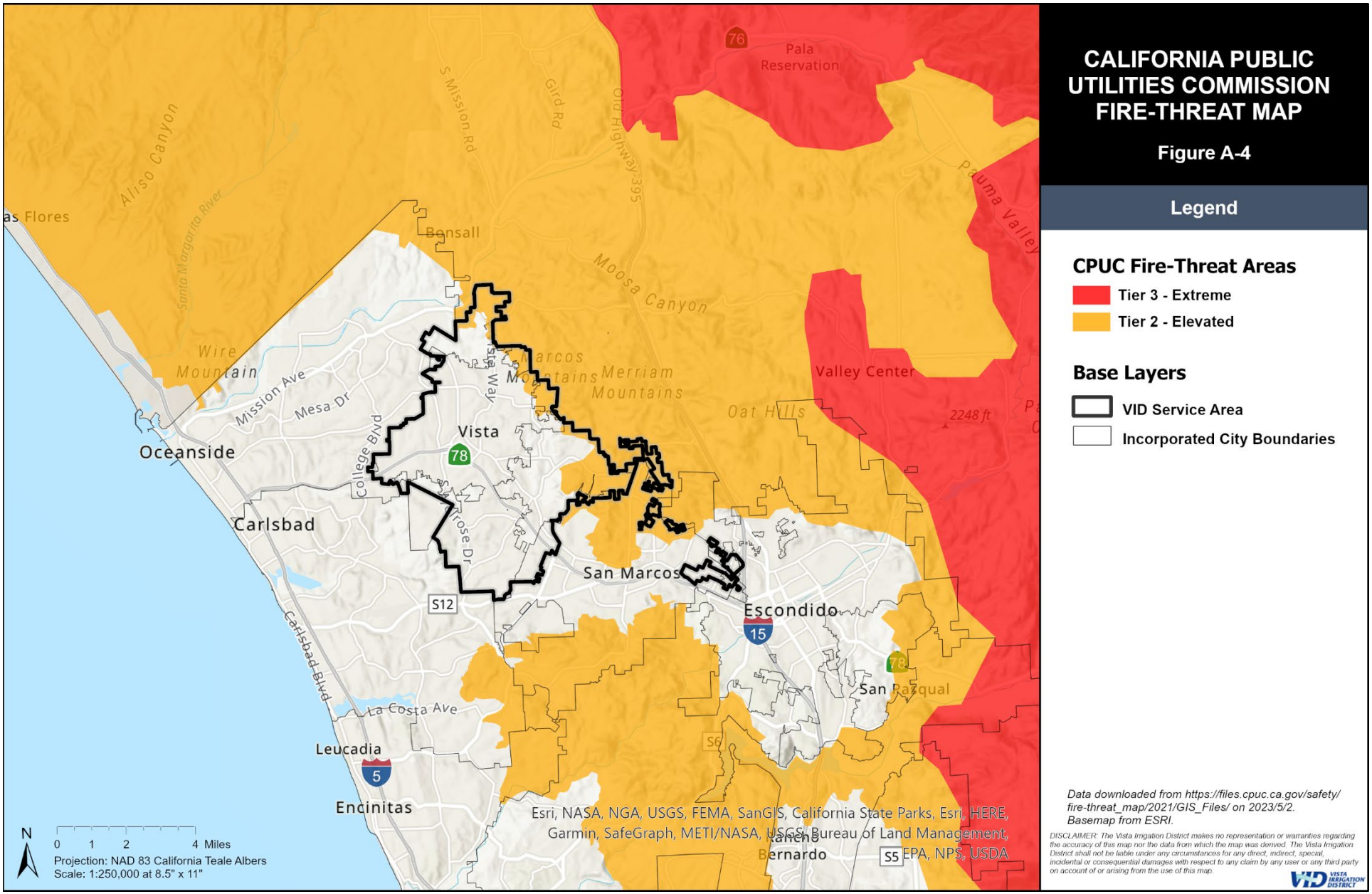
Frank Wolinski, Director of Operations & Field Services
Vista Irrigation District
1391 Engineer Street
Vista, CA 92081
(760) 597-3153
fwolinski@vidwater.org

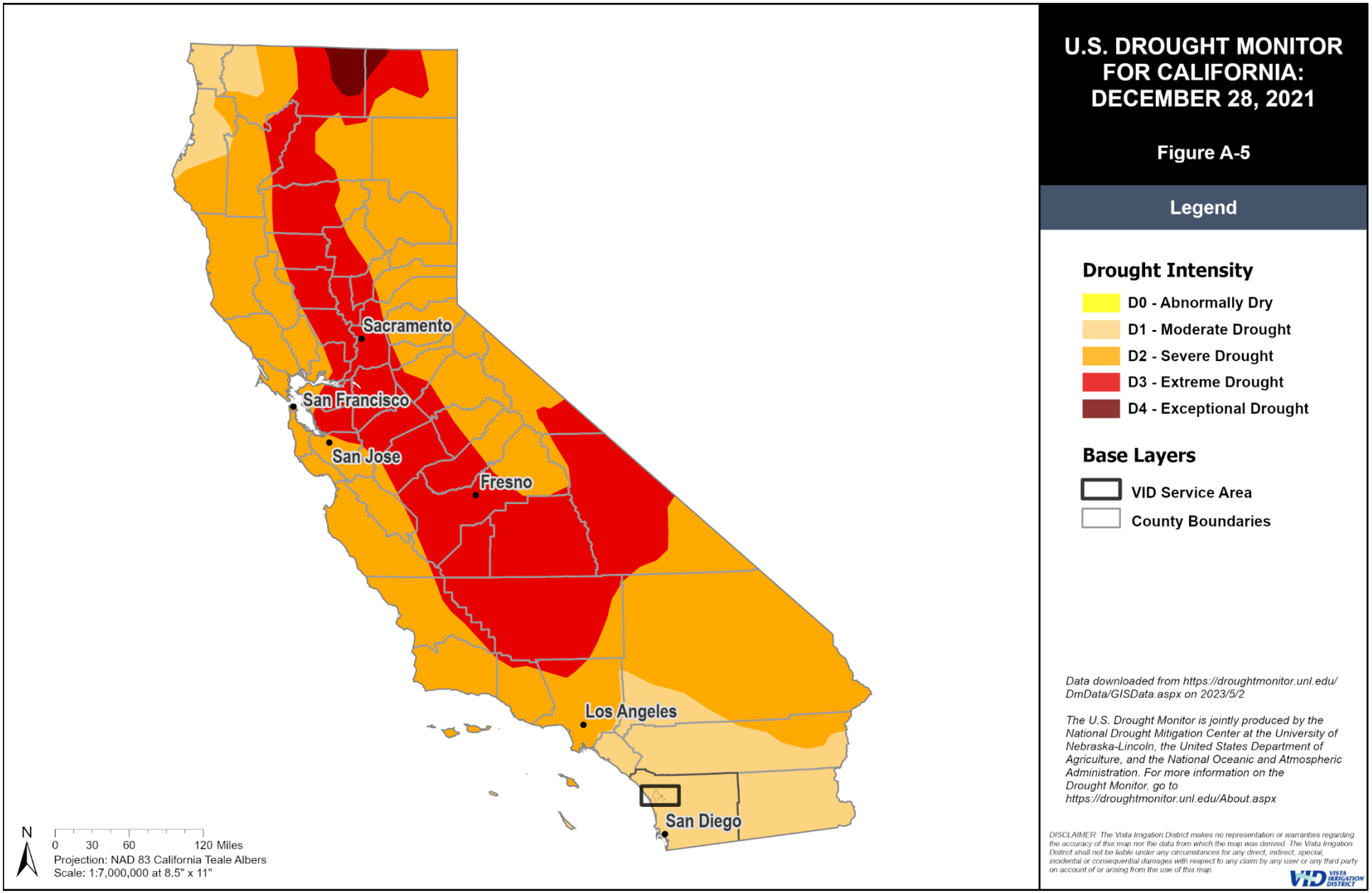
8. SECTION EIGHT: List of Figures




EARTHQUAKE SHAKING POTENTIAL
Figure A-2
Legend
Level of Earthquake Hazard
These regions are near major, active faults and will on average experience stronger earthquake shaking more frequently. This intense shaking can damage even strong, modern buildings.
Increasing Intensity
Value range visible on map.
These regions are distant from known, active faults and will experience lower levels of shaking less frequently. In most earthquakes, only weaker, masonry buildings would be damaged. However, very infrequent earthquakes could still cause strong shaking here.
Base Layers
VID Service Area
Incorporated City Boundaries
Data and legend symbology from California Geological Survey Map Sheet 48 (revised 2016).
Data downloaded from https://gis.conservation.ca.gov/server/rest/services/CGS/MS48_ShakingPotential/MapServer on 2023/5/2.
Basemap from ESRI.
DISCLAIMER: The Vista Irrigation District makes no representation or warranties regarding the accuracy of this map nor the data from which the map was derived. The Vista Irrigation District shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.
VID VISTA IRRIGATION DISTRICT
Oceanside
Carlsbad
Vista
San Marcos
Escondido
Valley Center
Leucadia
Encinitas
Bonsall
Wire Mountain
Merriam Mountains
Oat Hills
Mission Ave
Mesa Dr
Moosa Canyon
Pauma Valley
Alisos Canyon
Las Flores
Esri, NASA, NGA, USGS, FEMA, SanGIS, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA
N
0 1 2 4 Miles
Projection: NAD 83 California Teale Albers
Scale: 1:250,000 at 8.5" x 11"


STATE RESPONSIBILITY AREAS AND FIRE HAZARD SEVERITY ZONES
Figure A-3
Legend
Fire Protection Responsibility Area
Federal Responsibility Area (FRA)
State Responsibility Area (SRA)
Local Responsibility Area (LRA)
Fire Hazard Severity Zones in State Responsibility Area
Very High
High
Moderate
Fire Hazard Severity Zones in Local Responsibility Area
Very High
Base Layers
VID Service Area
Incorporated City Boundaries
Data downloaded from https://egis.fire.ca.gov/arcgis/rest/services/FRAP/SRA/MapServer and https://egis.fire.ca.gov/arcgis/rest/services/FRAP/FHSZ/MapServer on 2023/5/2
Basemap from ESRI.
DISCLAIMER: The Vista Irrigation District makes no representation or warranties regarding the accuracy of this map nor the data from which the map was derived. The Vista Irrigation District shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.
VID VISTA IRRIGATION DISTRICT
Oceanside
Carlsbad
Vista
San Marcos
Escondido
San Pasqual
Leucadia
Encinitas
Mission Ave
Mesa Dr
College Blvd
Carlsbad Blvd
78
5
15
S12
N
0 1 2 4 Miles
Projection: NAD 83 California Teale Albers
Scale: 1:250,000 at 8.5" x 11"
Esri, NASA, NGA, USGS, FEMA, SanGIS, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA


CALIFORNIA PUBLIC UTILITIES COMMISSION FIRE-THREAT MAP
Figure A-4
Legend
CPUC Fire-Threat Areas
Tier 3 - Extreme
Tier 2 - Elevated
Base Layers
VID Service Area
Incorporated City Boundaries
Pala Reservation
Bonsall
Moosa Canyon
Valley Center
Merriam Mountains
Oat Hills
2248 ft
Vista
Oceanside
Carlsbad
San Marcos
Escondido
San Pasqual
Leucadia
Encinitas
Rancho Bernardo
Wire Mountain
Mission Ave
Mesa Dr
College Blvd
Rose Dr
Carlsbad Blvd
La Costa Ave
Old Highway 395
Pauma Valley
Allso Canyon
Santa Margarita River
S Mission Rd
Gird Rd
Esri, NASA, NGA, USGS, FEMA, SanGIS, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA
N
0 1 2 4 Miles
Projection: NAD 83 California Teale Albers
Scale: 1:250,000 at 8.5" x 11"
Data downloaded from https://files.cpuc.ca.gov/safety/fire-threat_map/2021/GIS_Files/ on 2023/5/2.
Basemap from ESRI.
DISCLAIMER: The Vista Irrigation District makes no representation or warranties regarding the accuracy of this map nor the data from which the map was derived. The Vista Irrigation District shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.


U.S. DROUGHT MONITOR FOR CALIFORNIA: DECEMBER 28, 2021
Figure A-5
Legend
Drought Intensity
D0 - Abnormally Dry
D1 - Moderate Drought
D2 - Severe Drought
D3 - Extreme Drought
D4 - Exceptional Drought
Base Layers
VID Service Area
County Boundaries
Sacramento
San Francisco
San Jose
Fresno
Los Angeles
San Diego
N
0 30 60 120 Miles
Projection: NAD 83 California Teale Albers
Scale: 1:7,000,000 at 8.5" x 11"
Data downloaded from https://droughtmonitor.unl.edu/DmData/GISData.aspx on 2023/5/2
The U.S. Drought Monitor is jointly produced by the National Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx
DISCLAIMER: The Vista Irrigation District makes no representation or warranties regarding the accuracy of this map nor the data from which the map was derived. The Vista Irrigation District shall not be liable under any circumstances for any direct, indirect, special, incidental or consequential damages with respect to any claim by any user or any third party on account of or arising from the use of this map.
VID VISTA IRRIGATION DISTRICT

APPENDIX G

Reporting of Energy Intensity

Optional Submittal Table O-1A: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - WATER SUPPLY PROCESS APPROACH

Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	Only for Water Delivery Products Under the Urban Water Supplier's Operational Control							
Start Date of Reporting Period	7/1/2024	Water Management Process						Non-Consequential Hydropower (if applicable)	
End Date of Reporting Period	6/30/2025								
Is upstream embedded energy included in the values reported?									
		Units for Water Volume	Extract and Divert	Place into Storage	Conveyance	Treatment	Distribution	**Total Utility** See DWR NOTES	Hydropower	Net Utility
Volume of Water Entering Process		AF	8.3				16,976.7	16976.7	0	16976.7
Energy Consumed (kWh)		N/A	19,729				1,483,000	1,502,729	0	1,502,729
Energy Intensity (kWh/vol. converted to MG)		N/A	7294.7	0.0	0.0	0.0	268.1	271.7	0.0	271.65

DWR NOTES: Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)

Metered Data

Data Quality Narrative:

Water: Extract & Divert = Wellfield pumping (no losses). Distribution = metered into system w/exchanges. Energy: Extract & Divert = Energy consumed wellfield only (Building & grounds excluded).
Distribution = All intown energy consumed minus headquarters.

Narrative:

Water is extracted (pumped) from the wellfield into Lake Henshaw. Distribution system energy includes: reservoirs, pump stations, flow control facilities and cathodic protection. Note: Bear Valley Power Plant, Escondido-Vista WTP and solar at VID headquarters were not included as they are not under our operational control.

NOTES: