Woodard & Curran

2025 Urban Water Management Plan

Updated
April 2026

San Dieguito Water District
April 8, 2026

TABLE OF CONTENTS

SECTION **PAGE NO.**

EXECUTIVE SUMMARY **1**

E.S. Introduction 1
E.S. Plan Preparation 1
E.S. System Description 2
E.S. System Water Use 4
E.S. SB X7-7 Baselines, Targets, and 2020 Compliance 6
E.S. System Supplies 7
E.S. Water Supply Reliability 8
E.S. Water Shortage Contingency Planning 9
E.S. Demand Management Measures 9
E.S. Plan Adoption, Submittal, and Implementation 10

1. INTRODUCTION AND OVERVIEW **1-1**

1.1 Background and Purpose 1-1
1.2 Urban Water Management Planning and the California Water Code 1-3
1.2.1 Urban Water Management Planning Act of 1983 1-3
1.2.2 Applicable Changes to the CWC Sections since 2020 UWMPs 1-3
1.2.3 Water Conservation Act of 2009 (SB X7-7) 1-4
1.3 Urban Water Management Plans in Relation to Other Efforts 1-4
1.4 Recommended UWMP Organization 1-5
1.5 UWMPs and Grant or Loan Eligibility 1-5
1.6 Lay Description of 2025 UWMP 1-7

2. PLAN PREPARATION **2-1**

2.1 Basis for Preparing a Plan 2-1
2.1.1 Public Water Systems 2-2
2.2 Regional Planning 2-3
2.3 Individual or Regional Planning and Compliance 2-3
2.3.1 Regional UWMP 2-3
2.3.2 Regional Alliance 2-4
2.4 Fiscal or Calendar Year and Units of Measure 2-7
2.4.1 Fiscal or Calendar Year 2-7
2.4.2 Reporting Complete 2025 Data 2-7
2.4.3 Units of Measure 2-7
2.5 Coordination and Outreach 2-8
2.5.1 Wholesale and Retail Coordination 2-8
2.5.2 Coordination with Other Agencies and the Community 2-9
2.5.3 Notice to Cities and Counties 2-9

3. SYSTEM DESCRIPTION **3-1**

3.1 General Description 3-1
3.2 Service Area Boundary Maps 3-2

3.3 Service Area Climate 3-5
3.4 Service Area Population, Characteristics, and Land Use 3-7
3.4.1 Demographic, Social, and Economic Factors 3-9
3.4.2 Land Use 3-9

4. WATER USE CHARACTERIZATION 4-1

4.1 Recycled Versus Potable and Raw Water Demand 4-1
4.2 Water Uses by Sector 4-2
4.2.1 2025 Overview 4-3
4.2.2 Basis for Demand Projections 4-5
4.2.2.1 Water Savings from Codes, Plans, and Other Policies 4-6
4.2.3 Demand Projections 4-7
4.3 Distribution System Water Losses 4-10
4.4 Water Use for Lower Income Households 4-14
4.5 Climate Change 4-16

5. SB X7-7, 2020 TARGETS, AND 2025 REPORTING 5-1

5.1 Compliance with Retail Supplier 2020 Per Capita Demand Target 5-1
5.2 Regional Alliance 5-1

6. NORMAL-YEAR WATER SUPPLY CHARACTERIZATION 6-1

6.1 Purchased or Imported Water 6-1
6.2 Groundwater 6-3
6.3 Surface Water 6-4
6.4 Stormwater 6-6
6.5 Wastewater and Recycled Water 6-6
6.5.1 Recycled Water Coordination 6-7
6.5.2 Wastewater Collection, Treatment, and Disposal 6-7
6.5.3 Recycled Water System 6-15
6.5.4 Potential, Current, and Projected Recycled Water Uses 6-15
6.5.5 Current Uses 6-18
6.5.6 Potential and Projected Uses 6-18
6.5.7 Actions to Encourage and Optimize Future Recycled Water Use 6-20
6.6 Desalinated Water Opportunities 6-22
6.7 Exchanges or Transfers 6-22
6.8 Supply From Storage 6-23
6.9 Future Water Projects 6-23
6.10 Summary of Existing and Planned Sources of Water 6-25
6.11 Climate Change Impacts to Supply 6-28
6.11.1 Snowpack Change 6-28
6.11.2 Sea-Level Rise 6-29
6.11.3 Changes in Wet and Dry Periods 6-29
6.11.4 Change in Frequency and Intensity of Droughts 6-30
6.11.5 Demand Levels 6-30
6.12 Regulatory Conditions and Project Development 6-31
6.13 Energy Intensity of Supplies 6-32

7. WATER SUPPLY RELIABILITY AND DROUGHT RISK ASSESSMENT 7-1

7.1 Constraints on Water Sources 7-1
7.1.1 Local Surface Water Supply Constraints 7-2
7.1.2 Recycled Water Supply Constraints 7-3
7.1.3 Purchased and Imported Water Supply Constraints 7-3
7.2 Water Service Reliability Assessment 7-6
7.3 Drought Risk Assessment 7-8
7.4 Five-Year Drought Risk Assessment 7-13
7.4.1 Data and Methodology 7-14
7.4.2 Determination of Reliability 7-15
7.5 Regional Supply Reliability 7-16

8. WATER SHORTAGE CONTINGENCY PLAN 8-1

8.1 Water Supply Reliability Analysis 8-1
8.2 Summary of Plan 8-1
8.2.1 Annual Assessment 8-2
8.2.2 Data and Methodologies 8-3
8.2.3 Stages of Action 8-6
8.2.4 Water Shortage Emergency Response 8-13
8.2.5 Legal Authorities 8-14
8.3 Seismic Risk Assessment and Mitigation Plan 8-15
8.4 Communication Protocols 8-16
8.5 Penalties, Charges, and Other Enforcement of Prohibitions 8-16
8.6 Monitoring and Reporting of Customer Compliance 8-1
8.7 Consumption Reduction Methods 8-2
8.8 WSCP Refinement Procedures 8-3
8.9 Revenue and Expenditure Impacts 8-3
8.10 Special Water Feature Distinction 8-5
8.11 Plan Adoption, Submittal, Availability, and Amendment Procedures 8-5

9. DEMAND MANAGEMENT MEASURES 9-1

9.1 Water Waste Prevention Ordinances 9-3
9.2 Water Metering 9-3
9.3 Tiered Rate Structure 9-4
9.4 Programs to Assess and Manage Distribution System Real Losses 9-4
9.5 Public Education and Outreach 9-5
9.6 Water Conservation Program Coordination and Staffing Support 9-5
9.7 Other Demand Management Measures 9-6

10. PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION 10-1

10.1 Inclusion of All 2025 Data 10-1
10.2 Notice of Public Hearing 10-1
10.3 Notice to Cities and Counties 10-1
10.4 Notice to the Public 10-2
10.5 Public Hearing and Adoption 10-3
10.6 Plan Submittal 10-4

APPENDIX A: DISTRICT ELECTRONIC ANNUAL REPORT (2025) ..... A
APPENDIX B: REGIONAL ALLIANCE COOPERATIVE AGREEMENT ..... B
APPENDIX C: DISTRICT NOTIFICATION LETTERS TO CITIES, COUNTIES, AND OTHER AGENCIES AND ORGANIZATIONS C
APPENDIX D: DISTRICT WATER LOSS WORKSHEET ..... D
APPENDIX E: INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) CLIMATE CHANGE VULNERABILITY ASSESSMENT ..... E
APPENDIX F: LAKE HODGES WATER AGREEMENT ..... F
APPENDIX G: DWR UWMP TABLES ..... G
APPENDIX H: WATER AUTHORITY'S DRAFT REDUCED RELIANCE ON THE DELTA ..... H
APPENDIX I: NOTICE OF PUBLIC HEARING I
APPENDIX J: DISTRICT AGENDA REPORT FOR PUBLIC HEARING AND ADOPTION MEETING ..... J
APPENDIX K: DISTRICT RESOLUTION TO ADOPT UWMP ..... K
APPENDIX L: DWR CHECKLIST L
APPENDIX M: WATER SHORTAGE CONTINGENCY PLAN ..... M

TABLES

Table 2-1: Public Water system 2-2
Table 2-2: Plan Identification 2-5
Table 2-3: Supplier Identification 2-7
Table 2-4: Water Supplier Information Exchange 2-9
Table 3-1: Monthly Average Climate Data Summary (2000-2025) 3-5
Table 3-2: Monthly Average Climate Data Summary (2020-2025) 3-6
Table 3-3: Current and Projected Population (Calendar Year Data) 3-9
Table 4-1: 2025 Actual Total uses for Potable and Non-Potable Water 4-4
Table 4-2: Demand Forecast 4-7
Table 4-3: Projected Potable Water Demands 4-8
Table 4-4: Projected Total Demand 4-9
Table 4-5: Annual Water Losses 4-11
Table 4-6: Water Loss Audit Reporting – Submitted Reports 4-11
Table 4-7: Water Loss Audit Reporting 4-13
Table 4-8: Current and Projected Demands for Low-Income Housing 4-15
Table 4-9: Projection Components 4-16
Table 5-1: SB X7-7 2020 Target Progress 5-2
Table 6-1: Groundwater Volume Pumped from 2020-2025 6-4
Table 6-2: Wastewater Collected Within Service Area (2025) 6-12
Table 6-3: Wastewater Treatment and Outcomes within UWMP Service Area (2025) 6-13
Table 6-4: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area 6-17
Table 6-5: Comparison Between 2020 and 2025 Recycled Water Use Projections 6-20

Table 6-6: Methods to Expand Future Water Use 6-22
Table 6-7: Expected Future Water Supply Projects or Programs 6-25
Table 6-8: Actual Water Supplies (2025) 6-25
Table 6-9: Projected Water Supplies (2030-2050) 6-27
Table 7-1: Basis of Water Year Data 7-8
Table 7-2: Normal Year Supply vs. Demand 7-9
Table 7-3: Single Dry Year Supply vs. Demand 7-10
Table 7-4: Multiple Dry Year Supply vs. Demand 7-12
Table 7-5: Projected Potable Water Demands – Normal vs. Five-Year Drought Conditions 7-15
Table 7-6: Five-Year Drought Risk Assessment (Potable Water) 7-16
Table 8-1: Annual Assessment Process and Timeline 8-5
Table 8-2: Cross Reference for Standard vs. Supplier Shortage Levels 8-6
Table 8-3: Water Shortage Contingency Plan Stages 8-7
Table 8-4: Shortage Response Actions by Stage 8-8
Table 8-5: Penalties for Violation of Article 30 8-1
Table 8-6: Supply Augmentation and Other Actions 8-2
Table 9-1: San Dieguito Water District Schedule of Water Rates as of June 30, 2025 9-4
Table 10-1: List of Cities and Counties Notified 10-2

FIGURES

Figure 1-1: Water Service Area 1-2
Figure 2-1: Regional Alliance 2-6
Figure 3-1: Water Service Area 3-3
Figure 3-2: Recycled Water Service 3-4
Figure 4-1: Current Potable Water Use by Sector (2025) 4-5
Figure 4-2: Total Historical and Projected Demand 4-9

Acronyms

Acronym	Definition
AC	Asbestos Cement
ACS	American Community Survey
ADU	Accessory Dwelling Unit
AF	Acre-Foot
AFY	Acre-Feet per Year
AMI	Advanced Metering Infrastructure
AR	Atmospheric River
AWP	Advanced Water Purification
AWWA	American Water Works Association
BMP	Best Management Practice
Board	San Dieguito Water District Board of Directors
CCR	California Code of Regulations
CCB	Chlorine Contact Basin
CIMIS	California Irrigation Management Information System
CII	Commercial, Industrial, and Institutional
CRA	Colorado River Aqueduct
CSD	Cardiff Sanitary Division
CUWCC	California Urban Water Conservation Council
CWC	California Water Code
Delta	Sacramento–San Joaquin Bay Delta
District	San Dieguito Water District
DMM	Demand Management Measure
DSOD	Division of Safety of Dams
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
EAR	Electronic Annual Report
EI	Energy Intensity
Encinitas	City of Encinitas
ERGC	Encinitas Ranch Golf Course
ES	Executive Summary
ESD	Encinitas Sanitary Division
ESP	Emergency Storage Project
EWA	Encina Wastewater Authority
EWPCF	Encina Water Pollution Control Facility
GHG	Greenhouse Gas
GPCD	Gallons Per Capita Per Day
GPSCD	Gallons Per Service Connection Per Day
HOA	Homeowners Association
IID	Imperial Irrigation District
IPR	Indirect Potable Reuse
IRWM	Integrated Regional Water Management
IRWM Plan	Integrated Regional Water Management Plan
JADU	Junior Accessory Dwelling Unit
JPA	Joint Powers Authority

LWWD	Leucadia Wastewater District
MG	Million Gallons
MGD	Million Gallons Per Day
MHM Plan	Multi-Hazard Mitigation Plan
M&I	Municipal and Industrial
MF	Microfiltration
MWD	Metropolitan Water District of Southern California
OMWD	Olivenhain Municipal Water District
PFAS	Per- and Polyfluoroalkyl Substances
pph	Persons Per Household
PWS	Public Water System
QSA	Quantification Settlement Agreement
RDMWD	Rincon del Diablo Municipal Water District
R-GPCD	Residential Gallons Per Capita Per Day
RO	Reverse Osmosis
RUMP	Regional Urban Water Management Plan
RWMG	Regional Water Management Group
RUWMP	Regional Urban Water Management Plan
SANDAG	San Diego Association of Governments
SB	Senate Bill
SB X7-7	Water Conservation Act of 2009
SB9	Senate Bill 9 (Urban Lot Splits)
SDG&E	San Diego Gas & Electric
SEJPA	San Elijo Joint Powers Authority
SEWRF	San Elijo Water Reclamation Facility
SFID	Santa Fe Irrigation District
SWP	State Water Project
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
Title 22	California Code of Regulations Title 22 (Water Recycling Criteria)
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
UWUO	Urban Water Use Objective
Water Authority	San Diego County Water Authority
WSCP	Water Shortage Contingency Plan
WUE	Water Use Efficiency
WRF	Water Recycling Facility
WWTP	Wastewater Treatment Plant

EXECUTIVE SUMMARY

The San Dieguito Water District (District) has prepared this 2025 Urban Water Management Plan (2025 UWMP or Plan) in accordance and compliance with the Urban Water Management Planning Act (UWMP Act). The District's 2025 UWMP serves as the long-term planning document that will help to ensure the District can provide its customers with reliable water supplies through 2050. Pursuant to the requirements of CWC Section 10630.5, this Executive Summary (ES) provides a simple lay description of the information needed to provide a general understanding of this Plan and includes a description of the District's reliable water supplies, anticipated challenges, and strategies for managing system reliability risks.

Each of the chapters included in this Plan are summarized in the subsequent sections, with key findings highlighted.

E.S. Introduction

The District strives to continue to provide a safe and reliable supply of water to its customers within the City of Encinitas (Encinitas). Under the UWMP Act, the District is required to prepare a UWMP to provide a framework for long-term water planning and to develop a long-term water resource plan to ensure that enough water will be available to meet both current and planned customer water uses, also known as demands. This UWMP discusses the following components as related to the supplier: water demands and system uses, water use baselines and targets (to measure water conservation), water supplies, water supply reliability, water shortage contingency planning, and demand management measures.

E.S. Plan Preparation

The District is one of 22 member agencies of the San Diego County Water Authority (Water Authority), a water supply wholesaler. The District is known as a retail water supplier because it supplies water directly to customers. Typically, the District purchases and imports at least half of its annual water supply from the Water Authority and more than half in times of drought. Therefore, the District has coordinated this Plan with the Water Authority to accurately estimate its future water supplies. The District has also coordinated this Plan with Olivenhain Municipal Water District (OMWD), Vallecitos Water District (VWD), and Rincon del Diablo Municipal Water District (RDMWD) because the District is in a regional alliance with these agencies.

The District selected to report its data for this UWMP on a fiscal year basis as opposed to a calendar year basis, with fiscal year 2025 being the period between July 1, 2024 and

June 30, 2025. The District chose to report water volumes in units of acre-feet (AF). One AF equals about 326,000 gallons, or enough water to cover an acre of land, about the size of a football field, one foot deep.

E.S. System Description

The District's water service area covers 5,647 acres within Encinitas (as shown in **Figure ES-1**) and, in 2025, provided water to approximately 40,000 customers. Because the District's service area is mostly developed, its population is only projected to increase by approximately 7,227 people, or roughly 18%, over the next 25 years.

FIGURE ES-1: WATER SERVICE AREA

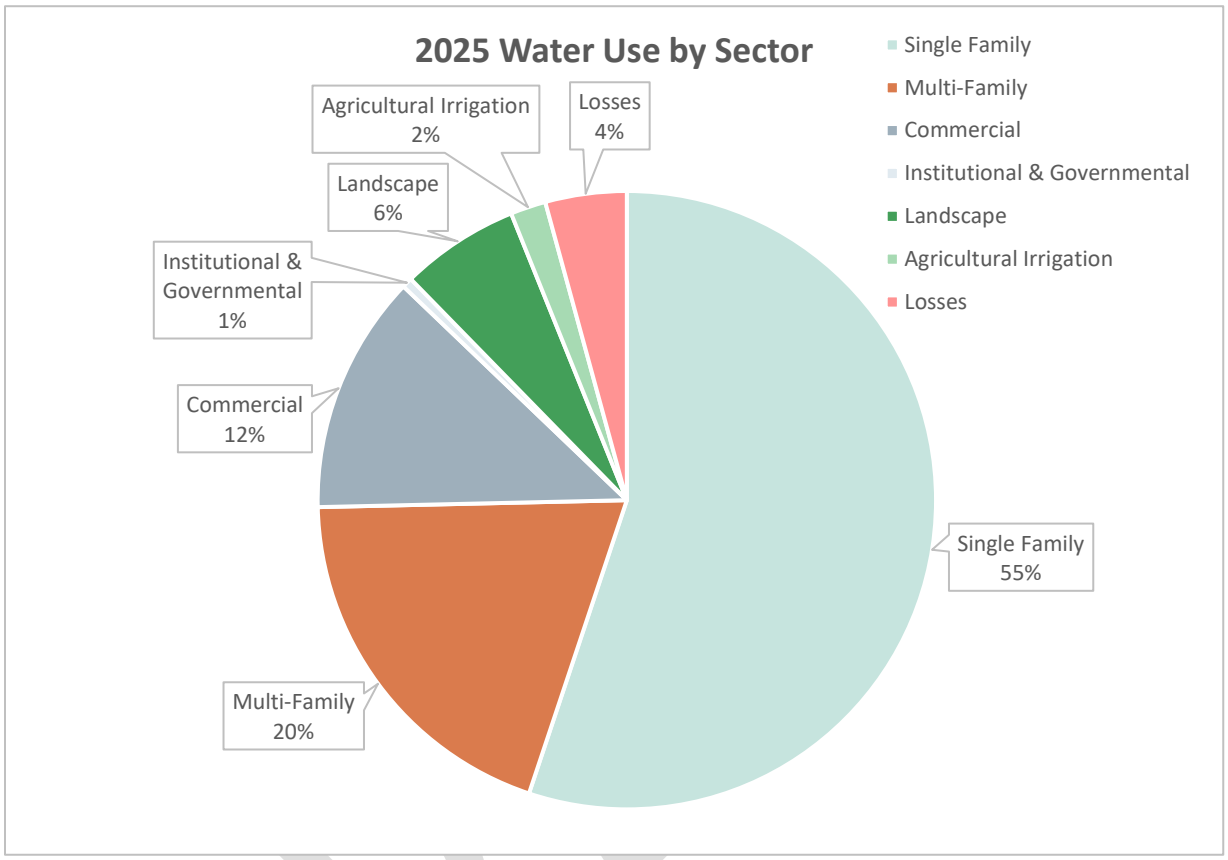
The District's population projections for the 2025 UWMP were developed using a combination of regional data from the District's population data from the annual reports, historic development trends, new known development projects, and local growth assumptions specific to the service area.

The District is located in an area that experiences a Mediterranean coastal climate, with warm, mild, and dry summers with average temperatures in the 70s and cool and mild winters with average temperatures in the 50s. The region also experiences lower than average rainfall compared to the rest of the country (an average of 10.41 inches per year between 2000-2025) and receives most of its rainfall within a relatively short period of time, both of which can present challenges to water supply planning. Most of the rainfall in the San Diego region occurs during the winter and spring months. As a result, the District typically experiences two very different water consumption patterns, one during the wet season and another during the dry season, when outdoor water use significantly increases in response to little or no rainfall.

E.S. System Water Use

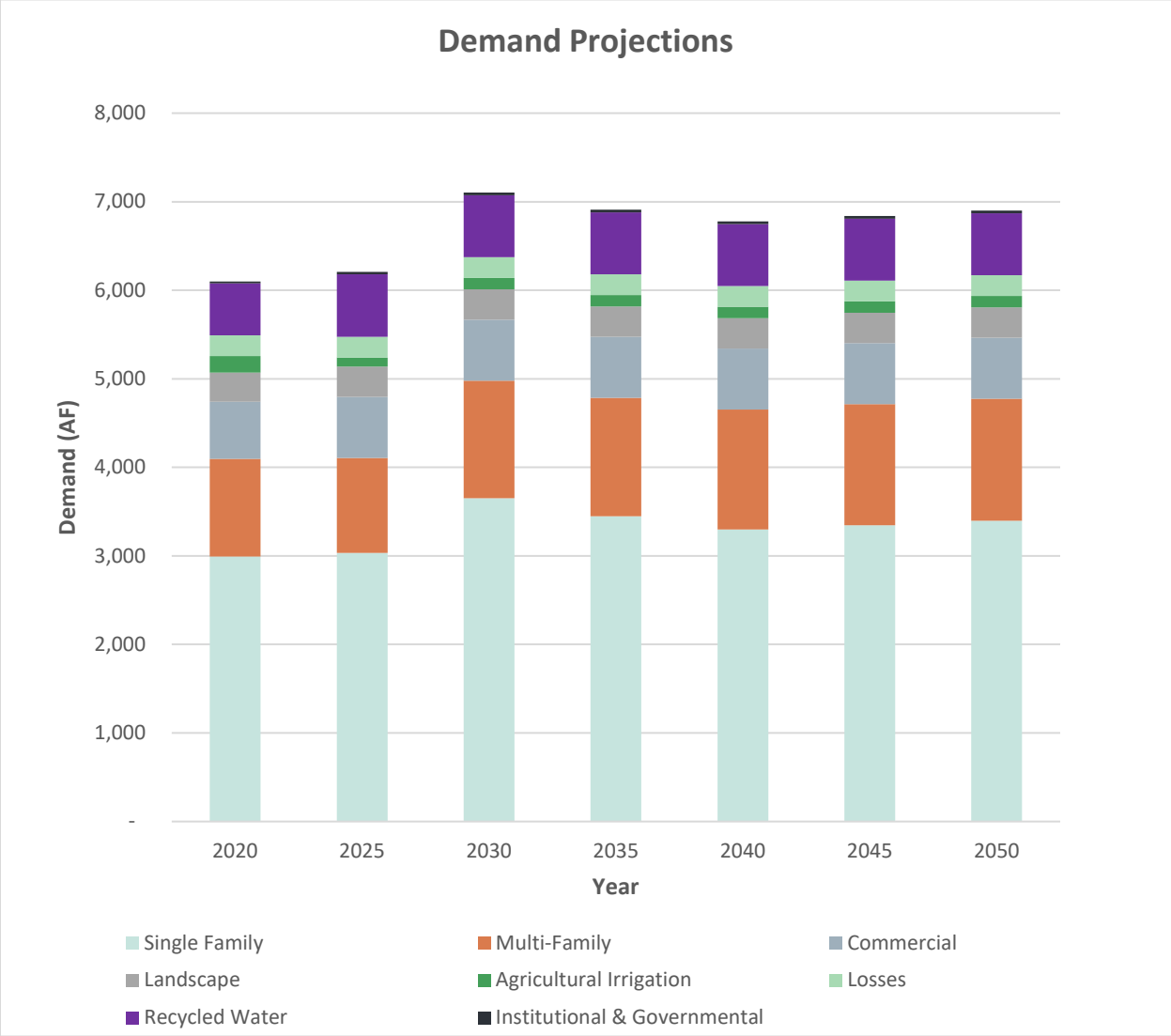
In fiscal year 2025, total potable (safe to drink) water demand in the District's service area was 5,502 AF (not including recycled water), of which 75% was for residential use (single-family and multi-family combined), 6% was for landscape irrigation, and 2% was for agricultural water use, as shown in **Figure ES-2.**

FIGURE ES-2: CURRENT WATER USE BY SECTOR (2025)



The District supplied 707 AF of recycled water in fiscal year 2025, making its total potable and recycled water demand equal to 6,209 AF including water loss. By 2050, the District's total potable and recycled water demands are projected to reach 6,900 AF, as shown in **Figure ES-3**. Because recycled water demands were conservatively forecasted to remain around 700 AFY through 2050, this projected increase in demands can be attributed to an increase in potable water use. This future projection also considers the impact of planned water conservation measures that typically lead to reductions in water use.

FIGURE ES-3: TOTAL HISTORICAL AND PROJECTED DEMAND



By comparison, water demand in the District's service area reached a peak in fiscal year 2000 of 8,168 AF. As water supplies became limited during drought conditions between 2012 and 2017, water use in the District substantially decreased as a result of water conservation and demand reduction measures.

E.S. SB X7-7 Baselines, Targets, and 2020 Compliance

The Water Conservation Act of 2009, known as SB X7-7 (an abbreviation for the seventh senate bill of the 2009-2010 seventh extraordinary session of the legislature), required the

District to reduce its per person (or per capita) water use by at least 20% by the year 2020. Suppliers measured compliance with SB X7-7 by calculating their baseline water use and comparing it to an established water use target. Water suppliers that did not achieve the required water use reductions were potentially ineligible to receive State funding. As a result, SB X7-7 has been a driver of suppliers' efforts to establish, promote, and prioritize water conservation programs and demand management measures to reduce water use.

The District met its required water use reduction and is in compliance with SB X7-7. The District's actual water use in fiscal year 2020 was 129 gallons per capita per day (GPCD), which was approximately 15% less than its 2020 target water use of 151 GPCD. For 2025, the GPCD for the District is 141 which is still below the SB X7-7 2020 Target.

E.S. System Supplies

The District's water supply portfolio includes imported water purchased from the Water Authority, local surface water from Lake Hodges, and recycled water purchased from the San Elijo Joint Powers Authority (SEJPA).

In fiscal year 2025, the District supplied 4,613 AF of imported water through purchases from the Water Authority. The Water Authority purchases water from the Metropolitan Water District of Southern California (MWD), sourced from both the Colorado River Aqueduct (CRA) and the State Water Project (SWP). The Water Authority also purchases desalinated seawater, which is treated to drinking water standards at the Claude "Bud" Lewis Carlsbad Desalination Plant (Carlsbad Desal Plant).

The District shares rights to local surface water that flows into Lake Hodges with the City of San Diego and the Santa Fe Irrigation District (SFID) through a water rights agreement. The District has rights to 2,434 AFY of storage capacity within Lake Hodges. However, due to dam performance and safety deficiencies, the California Department of Water Resources Division of Safety of Dams (DSOD) has temporarily lowered the maximum allowable water level, resulting in a reduction of the ability to capture local water. The District and SFID's shared water rights have been temporarily reduced. In fiscal year 2025, the District supplied 1,087 AF of local surface water from Lake Hodges. Full capture of local water rights is expected to return once the dam repair/ replacement is completed.

In fiscal year 2025, the District purchased 707 AF of recycled water to supply to its customers. Currently, the District provides recycled water to the Encinitas Ranch Golf Course, landscaped traffic medians, homeowner association (HOA) common areas, and a number of parks and schools within Encinitas.

Between 2025 and 2050, total supplies (including potable, recycled water, and water loss) are projected to decrease by 203 AFY, or 2.8%, from 7,103 AFY to 6,900 AFY to meet projected normal year demand. While population and residential demand is increasing projected conservation savings shows an overall decrease is total supplies.

E.S. Water Supply Reliability

This Plan presents the District's water reliability assessments from 2030 through 2050. Consistent with the UWMP Act requirements, each assessment compares total projected water supply to total projected water demands in five-year increments over the next 20 years under the following scenarios:

- Normal water year
- Single dry-year
- Multiple dry-year

The Water Authority's Draft 2025 UWMP reports that it anticipates imported and stored water would be sufficient to meet future demands of its member agencies under the single dry year and multiple dry year assessment when accounting for changes in local supply availability and regional demands. Therefore, the District could purchase additional supplies from the Water Authority to supplement the anticipated reduction in local surface water supplies. During drought conditions after the anticipated repair/ replacement of the dam, the District expects supplies from Lake Hodges to decrease. Lake Hodges is especially vulnerable to drought conditions because the amount of available water is largely driven by precipitation and runoff. Unlike the District's Lake Hodges surface water supply, recycled water is considered "drought-proof" because it is typically not vulnerable to low precipitation levels and drought conditions. The District's recycled water supplier, the SEJPA, also has the capacity to increase recycled water deliveries to the District should recycled water demands increase during drought conditions. The reliability assessment results concluded that projected available supplies would meet anticipated demands, demonstrating that the District's water supply mix is reliable and drought resilient.

A supplier must also include in its 2025 UWMP a drought risk assessment (DRA) to compare supplies and demands over a five-year consecutive dry period, or extended drought. Based on the Water Authority's drought assessment presented in its Draft 2025 UWMP, which showed sufficient supplies to meet member agency demands, the District's DRA, evaluated for the years 2026-2030, also assumed that the District could purchase additional supplies from Water Authority to supplement reductions and concluded that projected available supplies would meet anticipated demands, demonstrating resiliency.

E.S. Water Shortage Contingency Planning

The Water Shortage Contingency Planning chapter of this Plan discusses potential actions the District could take to address supply shortages due to a catastrophe, drought, or other supply disruption. It also highlights elements of the District's Water Shortage Contingency Plan (WSCP), including specific actions to be taken in response to various water shortage levels and the process of performing an annual water supply and demand assessment (Annual Assessment) to evaluate short-term reliability for the upcoming fiscal year. If the Annual Assessment anticipates that demands will exceed available supply, the District's Board will vote to determine the appropriate water shortage level and associated actions necessary to reduce demand to ensure adequate supply.

The WSCP (Water Supply Shortage Response Program, Article 29) serves as the District's guiding document to respond to water shortages and includes information on the process to prepare the Annual Assessment; the water shortage levels, their response actions, and the expected water savings; and penalties for violating Article 29. The District defines and activates its water shortage response levels in accordance with the levels defined and activated by the Water Authority.

Pursuant to 2018 legislation that was adopted in response to the recent severe drought, water suppliers were required to address several new requirements in their WSCPs, one of which included updating from four (4) to six (6) standard water shortage response levels (progressive ranges of 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage). Revisions to the District's Article 29 were adopted in May 2021 to comply with the new requirements. The WSCP was evaluated in during the 2025 planning process and readopted after a public hearing on May 20, 2026 with no updates.

E.S. Demand Management Measures

The California Water Code (CWC) defines "Demand Management" as water conservation measures, programs, and incentives that prevent the waste of water and promote reasonable and efficient use and reuse of available supplies. Demand management measures (DMMs) are developed and implemented for the purpose of reducing overall demand on a water supplier. Demand reductions can be achieved using several methods including water conservation, which is a relatively low-cost way to supplement water supply that is typically easy to implement. Water conservation is a key component in Southern California's strategy to meet water demand, and the District has demonstrated its commitment to water use efficiency and conservation by proactively supporting District, the Water Authority, and MWD water conservation programs since the early

1990s. Water conservation programs implemented by the District, either on its own or in combination with the Water Authority and MWD, include:

- Water conservation rebates and incentives
- Commercial and residential conservation audits and surveys
- Professional and residential workshops
- Customer and student outreach and education
- Large landscape budgets (i.e., Turf Replacement Program)
- Water conservation contents (i.e., 4th grade school poster content)

Additionally, adoption of SB X7-7 in 2009, as discussed in **Chapter 5 – SB X7-7 2020 Targets and 2025 Reporting**, promoted DMMs for the purpose of reducing demands to meet the required water use reductions. The District's participation in these water conservation programs aided in the achievement of its targeted reduction and compliance with SB X7-7.

E.S. Plan Adoption, Submittal, and Implementation

The District will hold two public hearings on May 20, 2026 to review public comments on its 2025 WSCP and 2025 UWMP. Because the public hearings may take place at the same meeting as the adoption hearing, the District also intends to adopt its 2025 WSCP and its 2025 UWMP on May 20, 2026. The District notified the appropriate agencies, cities, and counties on March 18, 2026 and March 20, 2026, at least 60 days prior to the public hearing. The District also published a notice of the public hearing in a local newspaper of general circulation twice, once a week for two successive weeks on May 1, 2026 and May 8, 2026 pursuant to Government Code 6066. District staff anticipate recommending that the 2025 WSCP and 2025 UWMP be adopted. The District will submit its 2025 WSCP and 2025 UWMP to DWR electronically through DWR's online submittal tool by July 1, 2026.

1. INTRODUCTION AND OVERVIEW

This Chapter presents an introductory discussion of the San Dieguito Water District's (District) 2025 Urban Water Management Plan (UWMP) and presents background information on the specifics of the California Water Code (CWC) and the requirements of the California Urban Water Management Planning Act of 1983 (UWMP Act).

1.1 Background and Purpose

The District provides potable and recycled water to approximately 40,000 people in the communities of Leucadia, Old Encinitas, Cardiff, and portions of New Encinitas. The District is a subsidiary district of the City of Encinitas (Encinitas), and the City Council serves as the District's Board of Directors.

The District is bordered on the north by the Carlsbad Municipal Water District, on the east by the Olivenhain Municipal Water District and on the south by the Santa Fe Irrigation District. These boundaries, and the District's service area, are shown in **Figure 1-1.**

FIGURE 1-1: WATER SERVICE AREA

The District recognizes that water planning has become increasingly important as the region has recently experienced an extended drought where water resources became limited. Additionally, the anticipated impacts of climate change include increased variability in water resource availability and increased drought frequency and intensity. As such, the District has prepared this 2025 UWMP in accordance with the UWMP Act.

1.2 Urban Water Management Planning and the California Water Code

Recognizing that the water resources of the State are limited, in 1983 the California legislature enacted the UWMP Act (CWC Sections 10610 - 10656). The UWMP Act requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000 acre-feet (AF) of water annually, shall prepare and adopt an UWMP. The UWMP Act, as revised by the legislature, requires that each urban water supplier update and adopt its plan at least once every five years on or before July 1, in years ending with one and six. A water supplier must complete an UWMP to be eligible for the water management grants or loan and drought assistance administered by the Department of Water Resources (DWR). A properly prepared and presented UWMP facilitates the development of and improves the quality of subsequent Water Supply Assessment and Verification Reports.

1.2.1 Urban Water Management Planning Act of 1983

The UWMP Act requires water agencies, such as the District, to prepare a UWMP to provide a framework for long-term water planning and to develop a long-term water resource plan to ensure adequate water supply for both existing and future demands. A UWMP should discuss the following components as related to the supplier:

- Water demands and system uses
- Water use baselines and targets
- Water supplies
- Water supply reliability
- Water shortage contingency planning
- Demand management measures

1.2.2 Applicable Changes to the CWC Sections since 2020 UWMPs

There have been no changes to the CWC Sections regarding UWMP reporting requirements for the 2025 cycle.

1.2.3 Water Conservation Act of 2009 (SB X7-7)

Starting in 2016, the State began requiring urban water suppliers to comply with the water conservation requirements of SB X7-7 in order to be eligible for State water grants or loans. The specific requirements of, and the District's compliance with, the Water Conservation Act are addressed in **Chapter 5 – SB X7-7 2020 Targets and 2025 Reporting**.

1.3 Urban Water Management Plans in Relation to Other Efforts

DWR recommends that other planning efforts and associated planning documents be incorporated into the 2025 UWMPs, as UWMPs are greatly enhanced with the inclusion of other such planning efforts. The following documents were used in the preparation of the District's 2025 UWMP:

- San Dieguito Water District 2020 UWMP, July 2021
- San Dieguito Water District 2022 Water System Master Plan, October 2021
- Encina Wastewater Authority Potable Reuse Strategic Plan, May 2025
- San Elijo Joint Powers Authority Recycled Water Rate Study, 2025
- San Dieguito Water District 2020 UWMP, May 2016
- City of Encinitas Water System Master Plan, June 2010
- Leucadia Wastewater District Asset Management Plan, April 2023
- Cardiff and Encinitas Sewer Master Plan Update, April 2011
- San Diego County Water Authority Draft Urban Water Management Plan, March 2026 (anticipated adoption is May 28, 2026)
- San Dieguito 2022 Water System Master Plan, October 2021
- City of Encinitas Climate Action Plan, January 2018
- City of Encinitas 2021-2029 General Plan Housing Element, April 2021
- Encina Wastewater Authority Water Reuse Feasibility Study, July 2018
- Encina Wastewater Authority Recycled Water Expansion Plant Development Study, 2019
- San Diego IRWM Plan Update, May 2019
- San Elijo Joint Powers Authority Recycled Water Optimization and Expansion Study, 2005
- San Diego County Multi-Jurisdictional Hazard Mitigation Plan, 2018
- San Francisco Bay/Sacramento-San Joaquin River Delta Watery Quality Control Plan (Bay-Delta Plan)

1.4 Recommended UWMP Organization

The DWR has released the 2025 Urban Water Management Plans Guidebook for Urban Water Suppliers (Guidebook), dated February 2026 to assist urban water suppliers with meeting the requirements of the UWMP Act.

While it is not required that urban water suppliers follow the Guidebook in the preparation of their 2025 UWMPs, it is recommended by the DWR. The DWR groups the UWMP Act requirements by topic and presents them in a suggested order that may be considered in the development of an UWMP. While the UWMP format outlined in the Guidebook is not required, the use of DWR's standard submittal tables is required.

The District's 2025 UWMP follows the Guidebook outline and uses the Guidebook's suggested Chapters as follows:

- Chapter 1 - Introduction and Overview
- Chapter 2 - Plan Preparation
- Chapter 3 – Service Area Description
- Chapter 4 – Water Use Characterization
- Chapter 5 - SB X7-7 2020 Targets, and 2025 Reporting
- Chapter 6 – Normal-Year Water Supply Characterization
- Chapter 7 - Water Supply Reliability and Drought Risk Assessment
- Chapter 8 - Water Shortage Contingency Planning
- Chapter 9 - Demand Management Measures
- Chapter 10 - Plan Adoption, Submittal, and Implementation

1.5 UWMPs and Grant or Loan Eligibility

CWC 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.*
>
> *(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.*

(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).

CWC 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.

23 CCR Section 596.1

(b)(2) "disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

For an urban water supplier to be eligible for a water management grant or loan administered by the DWR, they must have a current UWMP on file that has met the requirements of the UWMP Act. A UWMP may also be required for other State funding programs, depending on the specific requirements of each funding program.

In addition, changes to California law required that, beginning in 2016, urban retail water suppliers must comply with water conservation requirements established by the Water Conservation Act of 2009 (SB X7-7) to be eligible for State water grants or loans.

For 2025 UWMPs, this means that a retail water agency must meet its 2020 Urban Water Use Target (presented in **Chapter 5 – SB X7-7 2020 Targets, and 2025 Reporting**) and report compliance in the 2025 UWMP. As discussed in **Chapter 5**, the District met its 2020 Target and has complied with the SB X7-7 requirements.

Beginning January 1, 2025, urban retail water suppliers must also comply with the Making Conservation a California Way of Life regulation (CA Code of Regulations, Title 23, Section 965 et seq.). This means the supplier must calculate and comply with an urban water use objective, carry out related commercial, industrial, and institutional performance measures, and provide annual progress reports.

1.6 Lay Description of 2025 UWMP

An overall lay description of the 2025 UWMP, including information related to water service reliability, potential issues, and strategies for managing reliability risks, is provided as the **Executive Summary**.

2. PLAN PREPARATION

This Chapter contains information related to the preparation of the District's 2025 UWMP and includes information related to both individual and regional compliance, regional coordination, fiscal or calendar year units of measure for reporting, and general coordination and outreach.

This Chapter includes the following sections:

- Basis for Preparing a Plan
- Regional Planning
- Individual or Regional Planning and Compliance
- Fiscal or Calendar Year and Units of Measure
- Coordination and Outreach

2.1 Basis for Preparing a Plan

CWC 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.*

CWC Section 10608.12(t)

> *"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.*

CWC Section 10620

> *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.*

CWC 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.*

In accordance with the CWC Section, urban water suppliers with 3,000 or more customers or that supply more than 3,000 acre-feet per year of water must prepare a UWMP and update its plan once every five years. CWC Section 10621 requires submittal of the 2025 UWMP to the DWR by July 1, 2026.

As the District currently serves approximately 40,000 people through roughly 174 miles of water pipelines and supplies over 5,000 acre-feet per year (AFY) of potable water, it is required to prepare a 2025 UWMP that meets the requirements of the UWMP Act.

We wish to acknowledge the contribution of the following individuals for their participation, insight, and direction in the preparation of this 2025 UWMP: Isam Hireish, General Manager and Director of Utilities; Elmer Alex, Principal Engineer; Shoshana Aguilar, Finance and Administrative Services Manager; Kelly Ogawa, Water Resource Specialist; and Raul Gonzalez, District Operations Manager.

2.1.1 Public Water Systems

California Health and Safety Code 116275

> *(h) "Public Water System" means a system for the provision of water for human consumption through pipes or other constructed conveyances that has 15 or more service connections or regularly serves at least 25 individuals daily at least 60 days out of the year.*

Public Water Systems (PWS) are defined as systems that provide drinking water for human consumption. The District is a PWS, which is regulated by the State Water Resources Control Board, Division of Drinking Water. The District's Public Water System Number is CA3710021.

TABLE 2-1: PUBLIC WATER SYSTEM

DWR Table 2-1: Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025
CA3710021	SAN DIEGUITO WD	14,382	5,502
	TOTAL	14,382	5,502
NOTES: PWS Number and Name from the State Electronic Annual Reporting System Volume of water supplied does not include recycled. Connections includes fire service connections.			

The District submits Electronic Annual Reports (EARs) to the State's Electronic Annual Reporting System each year. The 2025 EAR is provided as **Appendix A**.

2.2 Regional Planning

Developing a UWMP as a cooperative effort can have a number of benefits. As a member of the San Diego County Water Authority (Water Authority), the District's water use targets that were developed as part of the 2020 UWMP will support the Water Authority's 2025 regional UWMP planning effort. The District collaborated in a Regional Alliance with Vallecitos Water District, Olivenhain Municipal Water District, and Rincon del Diablo Municipal Water District. This alliance was established under CWC Section 10608.28(a) and coordinated through the Water Authority.

2.3 Individual or Regional Planning and Compliance

Regional Planning can provide many benefits such as reduced preparation costs and regional cross jurisdictional integrated water management. Agencies may choose from the following reporting methods:

- Individual Reporting
- Regional Reporting
- Regional Urban Water Management Plan (RUWMP)
- Regional Alliance

2.3.1 Regional UWMP

CWC Section 10620

> *(d)(1) An urban water supplier may satisfy the requirements of this part by participation in area wide, regional, watershed, or basin wide urban water management planning where those plans will reduce preparation costs and contribute to the achievement of conservation, efficient water use, and improved drought resilience.*

As one of 22 member agencies of the Water Authority, the District is collaborating with the Water Authority to support the information presented in the Water Authority's 2025 UWMP; However, the District has opted to pursue Individual Reporting for its own 2025 UWMP, meaning that the District will report solely on its own service area and will develop a UWMP that meets all the requirements of the CWC Sections. As part of its 2025 UWMP, the District has notified and coordinated with the appropriate regional agencies and constituents.

2.3.2 Regional Alliance

CWC Section 10608.20

> *(a)(1) …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…*

CWC 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.*

Pursuant to the Water Conservation Bill of 2009 (SB X7-7), each urban retail water supplier was required to develop an urban water use target for 2020 and an interim urban water use target for 2015. Notably, SB X7-7 authorizes urban retail water suppliers to determine and report progress toward achieving these targets on an individual agency basis or pursuant to a regional alliance as provided in CWC Section 10608.28(a). The DWR Guidebook and the DWR Methodologies provide guidance to urban retail water suppliers for purposes of forming and carrying out a regional alliance in accordance with CWC Section 10608.28(a) and the related provisions of SB X7-7. The DWR Guidebook and the DWR Methodologies provide that urban retail water suppliers are eligible to form a regional alliance in accordance with CWC Section 10608.28(a) if the suppliers meet at least

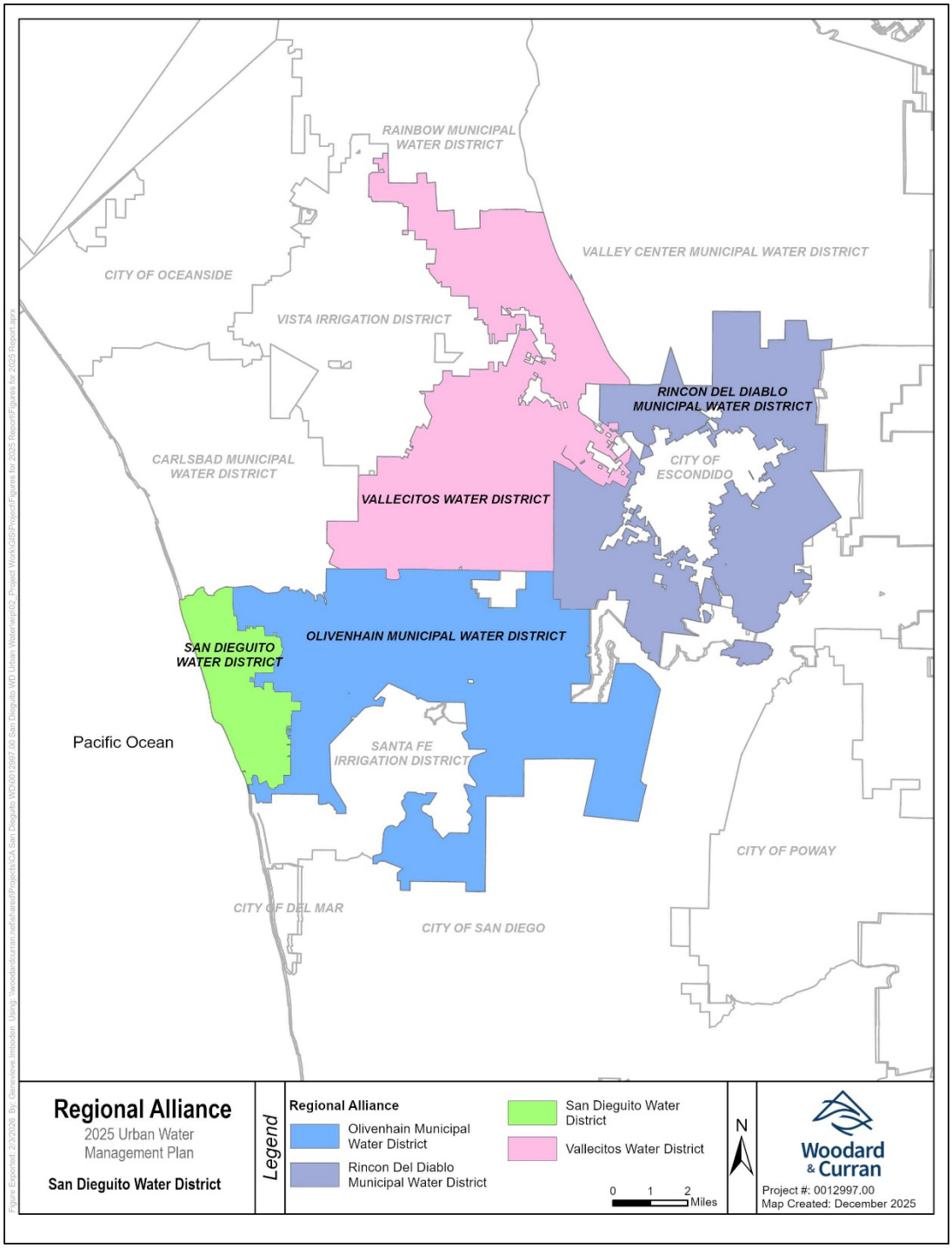
one of several specified criteria. These include when (1) the suppliers are recipients of water from a common wholesale water supplier, or (2) the suppliers are located within the same hydrologic region, which for purposes of a regional alliance refers to the 10 hydrologic regions as shown in the California Water Plan. The District, along with Vallecitos Water District, Olivenhain Municipal Water District, and Rincon del Diablo Municipal Water District formed a regional alliance as described above and depicted in **Table 2-2** and **Figure 2-1**. All of these agencies are recipients of water from a common wholesale water supplier, in this case the Water Authority, and are located within the South Coast Hydrologic Region as shown in the California Water Plan.

The members entered a cooperative agreement to establish and carry out a regional alliance and they have jointly notified DWR of the formation of their regional alliance. A copy of the Cooperative Agreement is included as **Appendix B**.

TABLE 2-2: PLAN IDENTIFICATION

DWR Table 2-2: Plan Identification		
Select One	**Type of Plan**	**Name of Regional Alliance of RUWMP**
☑	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	Olivenhain Regional Alliance
☐	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES: The District, along with Vallecitos Water District, Olivenhain Municipal Water District, and Rincon del Diablo Municipal Water District have formed a regional alliance.		

FIGURE 2-1: REGIONAL ALLIANCE



2.4 Fiscal or Calendar Year and Units of Measure

CWC Section 1608.20

> *(a)(1) Urban retail water suppliers…may determine the targets on a fiscal year or calendar year basis.*

The District is a water supply retailer that purchases water from the Water Authority. The data and units of measure included in the District's 2025 UWMP are discussed below and presented in **Table 2-3**.

2.4.1 Fiscal or Calendar Year

A water supplier has the option of reporting on a fiscal year or a calendar year basis, but it must be stated in the UWMP and remain consistent throughout the Plan. The District has selected fiscal year for all reporting in its 2025 UWMP.

2.4.2 Reporting Complete 2025 Data

2025 UWMPs are required to include water use and planning data for the entire year, either calendar or fiscal. In this case, the District's 2025 UWMP includes fiscal year data.

2.4.3 Units of Measure

The District is reporting water supply and use data based upon its 2025 fiscal year, beginning on July 1, 2024, and ending on June 30, 2025. Units of measure in the 2025 UWMP are in acre-feet (AF).

TABLE 2-3: SUPPLIER IDENTIFICATION

DWR Table 2-3: Supplier Identification	
Type of Agency	
☐	Supplier is a wholesaler supplier
☑	Supplier is a retailer supplier
Fiscal or Calendar Year	
☐	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)	
07/01	
Units of Measure Used in UWMP	

DWR Table 2-3: Supplier Identification	
Unit	AF
DWR Notes: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: Fiscal year reporting from 7/1/2024 to 6/30/2025. Units of measure are in acre-feet.	

2.5 Coordination and Outreach

CWC Section 10631

> *(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).*

2.5.1 Wholesale and Retail Coordination

Retail agencies, such as the District, that receive water supplies from one or more wholesalers are required to provide their wholesaler(s) with the retail agency's projected water demand from that source, in five-year increments for 20 years, or as far as data is available. As a member agency of the Water Authority, the District provided projected water demand information, as required by the CWC Section. The District's demands on the Water Authority are presented in **Chapter 3 – System Water Use**.

TABLE 2-4: WATER SUPPLIER INFORMATION EXCHANGE

DWR Table 2-4 Retail: Water Supplier Information Exchange
The retail supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name
San Diego County Water Authority (Water Authority)
NOTES:

2.5.2 Coordination with Other Agencies and the Community

CWC Section 10620

> *(d)(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.*

CWC 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…*

The District encouraged active involvement of diverse social, cultural, and economic elements of the population within its service area by posting a copy of its draft plan on its website and holding a public hearing to accept comments from the community. The District has also coordinated its planning efforts for this 2025 UWMP with the following agencies:

- San Diego County Water Authority
- County of San Diego
- City of Encinitas
- San Elijo Joint Powers Authority
- Santa Fe Irrigation District
- Olivenhain Municipal Water District
- Vallecitos Water District
- Rincon Del Diablo Municipal Water District

2.5.3 Notice to Cities and Counties

CWC Section 10621 (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.

All cities or counties within which the District provides water supplies (County of San Diego and Encinitas) were notified at least 60 days prior to the public hearing. Similar notification, as presented in **Appendix C**, was also provided to the Water Authority. The District will provide a copy of the adopted Plan to each city or county within the District's boundary no later than 60 days after its submission to DWR. A full list of the entities that received a 60-day notice and notice of public hearing is noted in **Table 10-1** (refer to **Chapter 10 Plan Adoption, Submittal, and Implementation**).

3. SYSTEM DESCRIPTION

This Chapter contains information related to the District's water system and service area and includes the following sections:

- General Description
- Service Area Boundary Map
- Service Area Climate
- Service Area Population, Characteristics, and Land Use

3.1 General Description

CWC Section 10631

> *(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.*

The District, formerly the San Dieguito Irrigation District, was formed in 1922 by a local developer to provide water for approximately 1,000 acres of land in the community of Leucadia. Arrangements were later made to purchase water from the Santa Fe Land Company at Lake Hodges to supply the communities of Encinitas, Cardiff-by-the-Sea, and Leucadia. Although the District was originally established to provide irrigation water to surrounding farms, ranches, and fruit groves, the area eventually developed into a suburban residential community and its water demands increased significantly as a result. Encinitas was incorporated in 1986 from the communities of Leucadia, historic Encinitas, Cardiff-by-the-Sea, and other surrounding communities. When Encinitas was incorporated, the District became a subsidiary district of the City. The five City Council members also serve as the Board of Directors of the District. Currently, residential and commercial customers make up the majority of the District's water sales.

The District joined the Water Authority in 1948 to acquire the right to purchase and distribute imported water throughout its service area. The Water Authority purchases

water from MWD, sourced from both the SWP and the Colorado River. The Water Authority also has its own supplies from desalinated seawater and the Colorado River, which are secured separately from the Water Authority's allocation from MWD. The District also receives local runoff water from Lake Hodges. Both the local and raw Water Authority sources are treated at the R.E. Badger Filtration Plant (Badger Plant), which is jointly owned by the District and the SFID. Treated water from the Water Authority can also be delivered directly to the District. The District receives recycled water from SEJPA. The District's water supplies are discussed in more detail in Chapter 6 – Normal Year Water Supply Characterization.

The District's current water service area comprises 5,647 acres and serves a population of 40,405. The District is more than 90% built out; and, therefore, projected growth within the District's service area is expected to be low. The District's terrain varies in elevation from sea level to approximately 400 feet above sea level due to its variable landscape consisting of rolling hills and valleys. The District's climate is semi-arid and average annual precipitation within the District was 10.4 inches from 2000 to 2024.

3.2 Service Area Boundary Maps

DWR recommends that service area maps be included in the 2025 UWMP. **Figure 3-1** and **Figure 3-2** show the District's potable water service area and its recycled water system, respectively.

FIGURE 3-1: WATER SERVICE AREA

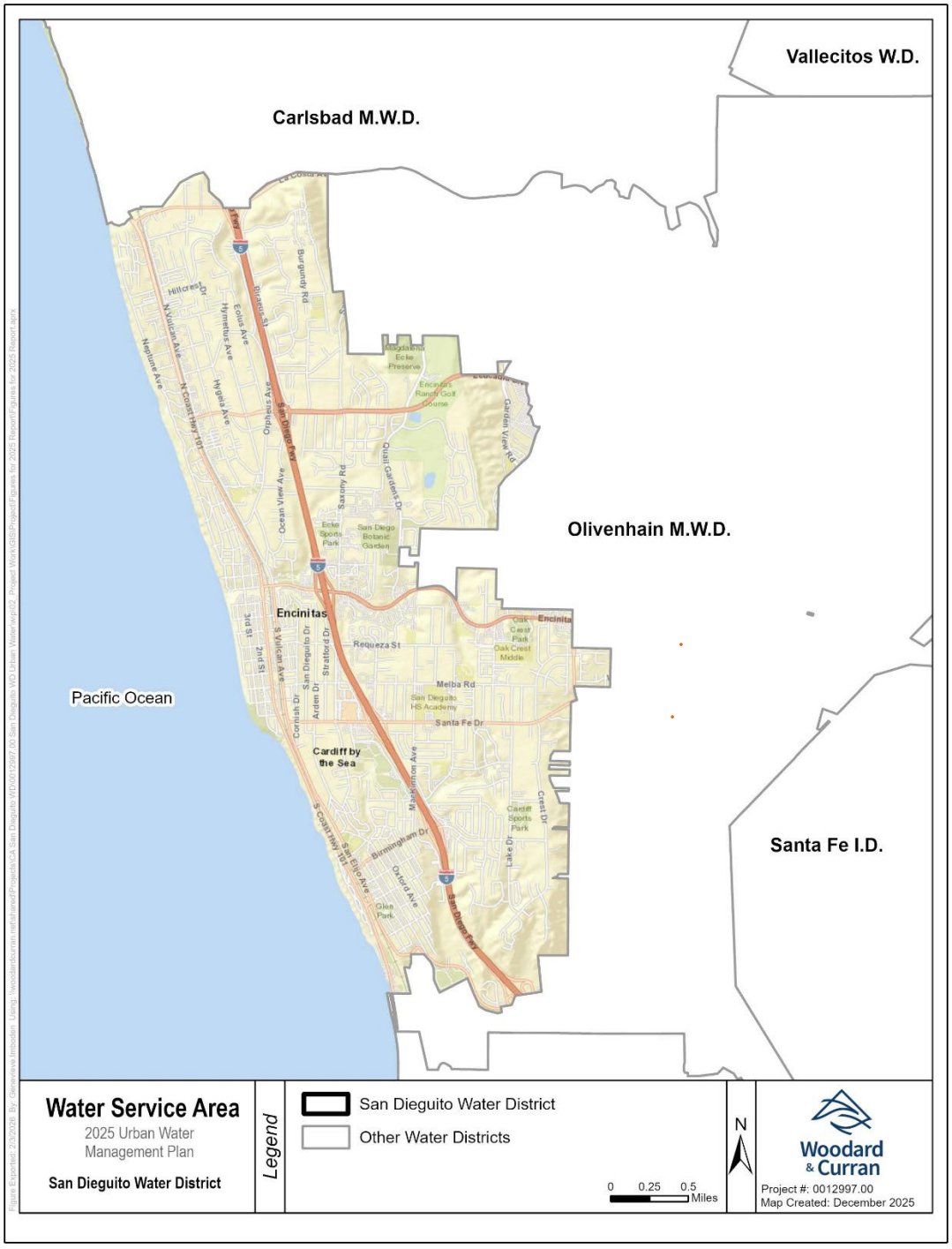
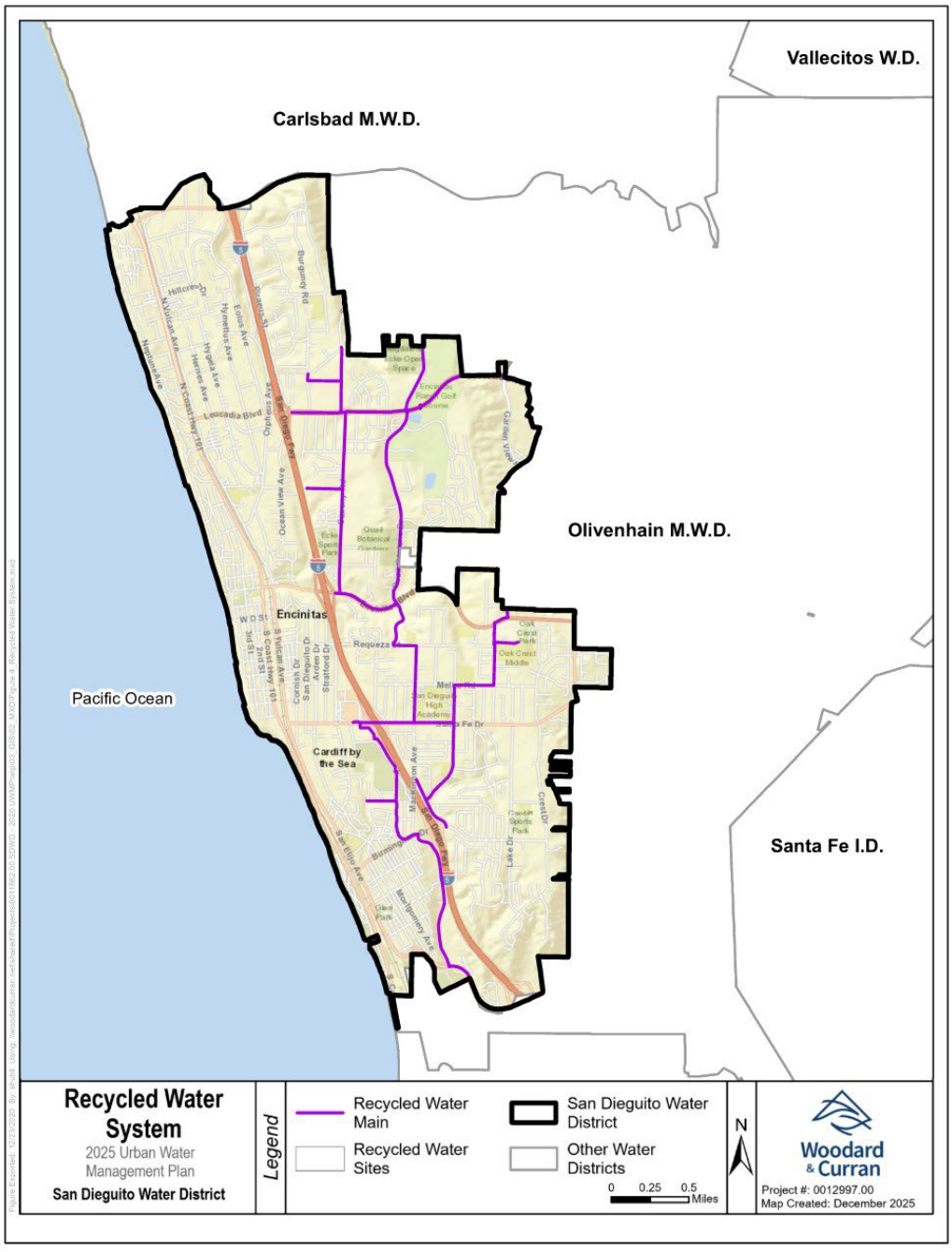


FIGURE 3-2: RECYCLED WATER SERVICE



3.3 Service Area Climate

CWC Section 10631

(a) Describe the service area of the supplier, including… climate…

The District is located within a Mediterranean coastal climate zone characterized by warm, dry summers and mild, cooler winters. Average summer temperatures are in the 70s (°F), while winter temperatures average in the 50s (°F). This climate pattern results in distinct wet and dry seasons, with the majority of annual precipitation occurring during the winter months.

To characterize local climate conditions, the District relies on data from the California Irrigation Management Information System (CIMIS), operated by the California Department of Water Resources. The Miramar CIMIS Station (Station 150), located at Latitude 32.885847 and Longitude –117.143140, is the closest active weather station to the District's service area. This station showed average total annual rainfall was 10.40-inches from 2000-2024 with the most amount of rain from December to March. Precipitation data from the last 5 years showed an similar average annual precipitation of 10.47.

Table 3-1 summarizes the rainfall and temperature data collected at the Miramar CIMIS station from 2000-2025. **Table 3-2** summarizes the rainfall and temperature data from the same station from 2020-2025. The City of Encinitas Climate Action Plan (2020), which estimated Encinitas' historical annual average precipitation using Cal-Adapt's Annual Averages Tool as 10.9 inches from 1950-2005. Under the Cal-Adapt high emissions scenario, Encinitas is projected to receive 14.5 inches of rainfall by the end of the century. These numbers are comparable to the results we see from the CIMIS weather station.

TABLE 3-1: MONTHLY AVERAGE CLIMATE DATA SUMMARY (2000-2025)

Monthly Precipitation and Climate Data				
Month	Average Total Rainfall (inches)	Average Temperature (degrees Fahrenheit)		
	Mean	Max	Min	Mean
January	1.95	67.5	43.8	54.8
February	2.26	66.4	44.8	55.0
March	1.60	66.7	47.4	56.6
April	0.76	68.7	49.8	58.8
May	0.28	70.4	54.2	61.5
June	0.03	73.8	58.2	64.7

Monthly Precipitation and Climate Data				
Month	Average Total Rainfall (inches)	Average Temperature (degrees Fahrenheit)		
	Mean	Max	Min	Mean
July	0.01	78.3	62.0	68.6
August	0.08	80.0	62.7	69.9
September	0.14	80.0	61.3	69.0
October	0.54	76.2	55.7	64.8
November	0.94	71.8	48.5	59.2
December	1.83	66.7	44.1	54.5
Total	**10.41**	N/A	N/A	N/A
Source: https://cimis.water.ca.gov/WSNReportCriteria.aspx Miramar, San Diego: Station ID 150				

TABLE 3-2: MONTHLY AVERAGE CLIMATE DATA SUMMARY (2020-2025)

Monthly Precipitation and Climate Data				
Month	Average Total Rainfall (inches)	Average Temperature (degrees Fahrenheit)		
	Mean	Max	Min	Mean
January	2.05	66.4	43.2	54.1
February	1.10	67.0	43.9	54.8
March	3.33	65.4	46.4	55.5
April	0.86	68.6	50.2	58.7
May	0.12	70.5	54.6	61.5
June	0.04	74.6	58.5	65.2
July	0.03	79.4	62.4	69.1
August	0.27	81.9	63.5	71.1
September	0.18	81.4	62.4	70.4
October	0.32	76.8	55.6	65.0
November	0.81	72.5	47.8	59.0
December	1.35	67.8	44.9	55.4
Total	**10.47**	N/A	N/A	N/A
Source: Source: https://cimis.water.ca.gov/WSNReportCriteria.aspx Miramar, San Diego: Station ID 150				

The District's Mediterranean coastal climate, combined with relatively low annual rainfall compared to local water demands, presents particular challenges to water supply planning, both short term and long term. The fact that the region experiences most of its rainfall within a relatively short amount of time also presents challenges to water agencies in Southern California, including the District. As a result, the District typically experiences two very distinct water consumption patterns, one during the wet season and another during the dry season, when landscape irrigation increases dramatically.

Climate change is intensifying these challenges. Rising temperatures and shifting precipitation patterns have increased wildfire risk throughout California and in the Encinitas area, a trend expected to continue. Areas with rugged terrain and dense vegetation are especially vulnerable and face higher potential for rapid wildfire spread. Wildfires also threaten both the quantity and quality of water supplies. They can alter the volume of water originating from upstream watersheds and change the seasonal timing of flows, which may lead to shortages if water availability decreases during periods of high demand.

Climate Change and its impact on District water use, supplies, and reliability is addressed further in **Chapter 4 – Water Use Characterization** (Section 4.5), **Chapter 6 – Normal-Year Water Supply Characterization** (Section 6.10) and **Chapter 7 – Water Supply Reliability and Drought Risk Assessment** (Section 7.1).

3.4 Service Area Population, Characteristics, and Land Use

CWC Section 10631

> *(a) Describe the service area of the supplier, including current and projected population … 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 District coordinated with the San Diego Association of Governments (SANDAG), the Water Authority, and the State Water Resources Control Board (State Water Board) to use the most recent population, demographic, socioeconomic, and land use data. In order to develop its population projections, SANDAG extensively gathers information from a number of sources including city and county general and specific plans, U.S. Census Bureau data, County Assessor information, various standard demographic information including birth and death records, and other available land use and planning documents. Each year, SANDAG's findings are compared with the State Department of Finance figures that consider drivers' license data, tax records, and other pertinent demographic information.

The District's population projections for the 2025 UWMP were developed using a combination of regional data from SANDAG, the District's own population data from electronic Annual Report (eAR), and local growth assumptions specific to the service area. SANDAG's most recent Series 15 Regional Growth Forecast projects limited growth for the San Diego region, with population expected to peak around 2035 before gradually declining. This regional forecast reflects long-term demographic shifts, including declining birth rates, an aging population, and reduced net migration. While these factors result in negative growth projections at the regional scale, the District's local service area is anticipated to continue experiencing modest growth tied to specific planned developments and incremental increases in housing.

The District's total population was estimated at 40,405 in calendar year 2025, as shown in **Table 3-3**, (Safe Drinking Water Information System). **Table 3-3** also includes population estimates for the District's service area through 2050, in 5-year increments. Growth was adjusted in 2030 to reflect the addition of a planned 2,000 new housing units, multiplied by the average number of people per household (2.69 pph). Following years' populations assume a 1% increase per year. The District is relatively built out and its total population is only projected to increase by approximately 18% between 2025 and 2050, which equates to a total population increase of approximately 7,227 people over the 25-year planning horizon for the 2025 UWMP. Note that the population estimates provided in **Table 3-3** are in terms of calendar year, rather than fiscal year because the population projection data were provided for calendar years. Given that annual average population growth is low in the District's service area, it is unlikely that there is a significant difference between fiscal year and calendar year population projections.

TABLE 3-3: CURRENT AND PROJECTED POPULATION (CALENDAR YEAR DATA)

DWR Table 3-1 Retail: Population - Current and Projected						
Population Served	2025	2030	2035	2040	2045	2050
	40,405	45,483	45,938	46,397	46,861	47,330
NOTES: 2030 population based on planned increase in housing units. 2035-2050 populations based on 1% growth.						

The future population projections from 2025 – 2030 include growth attributed to the new planned housing developments within Encinitas (with some affordable housing units) which are described in more detail in **Section 3.4.2**. The population projections have slightly changed compared to previous UWMPs because SANDAG was projecting a significant decrease in population estimates for the area, which did not align with the new development planned.

3.4.1 Demographic, Social, and Economic Factors

CWC Section 10631(a)

> *Describe the service area of the supplier, including... other social, economic, and demographic factors affecting the supplier's water management planning.*

Most of the District's service area population lives in the Encinitas, which according to the U.S. Census Bureau (2020), has a median household income of $150,471 and 7.3% of the population living at or below the poverty line. The U.S. Census Bureau also estimates that 16% of the population speaks a language other than English home, 42% of the population is under 18 years old or 65 years and older. 67% of the population have a bachelor's degree or higher education.

The District does not have any significant demographic factors that would affect its water management planning; however, the District is anticipating densification of land uses in the future as described in **Section 3.4.2**. This land use change has been accounted for in the District's forecast of accounts and associated usage, which is included in **Chapter 4 – Water Use Characterization**.

3.4.2 Land Use

CWC Section 10631(a)

> *Describe the service area of the supplier...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..

The District's current land use primarily consists of single-family residential use types, with approximately 78% of its customer base consisting of single-family residences. Multi-family residences represent another 14% of the District's customer base, with the remaining 8% consisting of non-residential use types (i.e., commercial, institutional, agricultural, etc.). The average residential lot size within the District is approximately 0.3 acres with a household density of 2.52 pph in 2018 according to Encinitas 2021-2029 Housing Element Update (adopted April 2021 as Resolution 2021-16). The 2020 Census, persons per household estimates are 2.69 pph, slightly higher than the report conducted in 2018.

The District expects its population density to increase over the 2025 UWMP planning horizon as a result of planned development within the Encinitas. The City's Housing Element is consistent with the goals of its General Plan which identifies and prioritizes several strategies and programs focused on providing affordable housing for all persons, including:

- Conserving and improving existing affordable housing;
- Providing adequate sites and range of housing types;
- Assisting in the development of affordable housing;
- Removing governmental and other constraints to housing development; and,
- Promoting equal housing opportunities.

The District anticipates development of approximately additional 2,000 new units (combination of both single family and multi-family and SB9 by 2030. This growth is primarily infill and redevelopment rather than greenfield development, which may impact demand differently than traditional suburban growth.

Encinitas also previously adopted three ordinances in 2018 in an effort to meet housing demand related to the following subjects, (1) updating to the existing Accessory Dwelling Unit (ADU) development standards [2018-01, 2018-11], and (2) allowing and defining provisions for Junior Accessory Dwelling Units (JADU) consistent with state law [2018-02]. Adoption of these ordinances replaced the Encinitas' previous definitions of ADU and

JADU with the state's definitions to promote and support construction of ADUs to meet housing demand.

In 2019, Encinitas amended its zoning regulations through the adoption of Ordinance No. 2019-04, which included implementation of a new land use designation from the General Plan known as the R30 Overlay Zone (R30-OL). Consistent with the General Plan's goals of expanding affordable housing, the R30-OL was implemented to provide additional residential development opportunities for sites to accommodate lower income housing with a minimum density of 25 units per acre and a maximum density of 30 units per acre.

On June 20, 2018, the Encinitas City Council approved 15 sites, consisting of approximately 1,500 housing units, to be rezoned to the R30-OL. Approximately 1,301 of these 1,500 affordable housing units are located in the District's service area and the remaining 199 units are located within Olivenhain MWD's service area.

Future land use within the District is expected to remain predominantly residential, with a gradual increase in higher-density housing types, including multi-family units and accessory dwelling units. Non-residential land uses are expected to remain relatively stable as a proportion of total service area demand.

Projected land use changes directly inform the District's water demand forecasts and planning assumptions. Increased residential density, including multi-family development, ADUs, and SB9 lot splits, is expected to shift water use patterns toward higher indoor demand and reduced outdoor irrigation demand per household. This anticipated densification has been accounted for in the District's forecast of accounts and associated usage and is discussed in **Chapter 4 – Water Use Characterization**.

On December 16, 2020, the Encinitas City Council adopted Ordinance No. 2020-09 to provide an increased density bonus to incentivize the development additional affordable house as an alternative to Assembly Bill 2345.

On November 9, 2022, the Encinitas City Council adopted Ordinance No. 2022-17 for new development and design standards for urban lot splits and two-unit development in single-family zones under Senate Bill ("SB9").

Compared to the 2015 UWMP projections, the anticipated densification may increase water use because the sites approved for rezoning are currently zoned as land uses with significantly lower maximum densities permitted (i.e., agriculture, single-family residential). However, densification is likely to reduce outdoor water use and result in a lower per-capita water use on the same sites, which could result in lower water overall water use, especially when coupled with indoor water use efficiency.

4. WATER USE CHARACTERIZATION

Water use in the District is linked to weather, population, and the local economy. The District keeps records of its system's metered water deliveries and categorizes them by sector. In the late 1990s and early 2000s, the land within the District's service area was rapidly developing, and water use had been steadily rising. Water use reached 8,168 AFY in fiscal year 2000. From fiscal years 2001 to 2009, water use averaged 7,275 AFY of potable water and 558 AFY of recycled water as land use patterns and population stabilized. As water supplies became limited due to drought conditions between 2012 and 2017 and due to the adoption of the Water Conservation Act in 2009 (SB X7-7), the combination of water rationing and implementation of conservation programs further reduced demand for potable water, as reported in the 2015 UWMP. Potable water use decreased to an average of 6,109 AFY from fiscal years 2010 through 2015. During that time period, use of recycled water grew to 616 AFY, for a total annual demand of 6,725 AFY (potable and recycled water). Water use continued to shift even after drought conditions ended in 2017, averaging 5,276 AFY in 2020.

Since the 2020 UWMP, potable water use averaged 5,297 AFY from 2020-2025. 2023 and 2024 saw a decrease in potable water use due to wet climatic conditions averaging 4,909 AFY. 2021 had the highest potable use of 5,831, which was a dry climatic year. The overall steady state of water demand reflects the limited changes in development and population growth discussed in **Chapter 3 – System Description**.

In order to properly analyze the use of the District's water sources and to better plan and manage the District's future water supply, this chapter describes the District's current and projected water use through the year 2045.

This Chapter includes the following sections:

- Recycled versus Potable and Non-Potable Water Demand
- Water Uses by Sector
- Climate Change
- Distribution System Water Losses
- Water Use for Low Income Households

4.1 Recycled Versus Potable and Raw Water Demand

As water supplies have become more volatile due to climate change, a diversified portfolio of water supply sources is encouraged. Recycled water provides one of the options for supply diversification. The District's recycled water use increased substantially from 2010 through 2015 and has continued to increase over the last five years, though at a slower

rate with an average of 656 AF. Raw water from Lake Hodges is treated to drinking water levels through the Badger Plant before it is distributed to the District's water system. Therefore, no raw water is distributed within the District. The District's supply portfolio will be discussed in more detail in **Chapter 6 – System Supplies**.

4.2 Water Uses by Sector

CWC Section 10631

> *(d)(1) For an urban water retail 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.*
>
> *(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.*

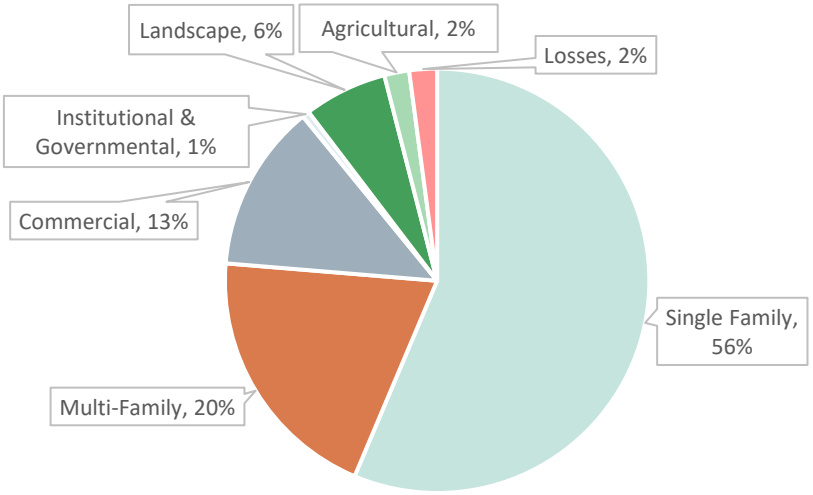
4.2.1 2025 Overview

Pursuant to CWC Section 10631, the District is required to include the historical, current, and projected water use in five-year increments in this Plan. Water use data were obtained from the District's water meter records and categorized into the different demand sectors that are accepted by DWR's Water Use Efficiency (WUE) Data online submittal tool, including single family residential, multi-family residential, commercial, industrial, institutional and government, landscape, and agricultural. In the 2020 UWMP, total potable water use for 2025 was projected to be 6,496 AFY; however, the actual metered water use for 2025 was 17% lower than projected at 5,268 AFY (excluding water loss). The distribution system water losses in FY 2024-2025 were 234 AFY, as estimated based on the American Water Works Association (AWWA) water audit methodology as discussed in Section 0. The District's actual 2025 water use is presented by sector in **Table 4-1** and, for potable water, in **Figure 4-1.**

TABLE 4-1: 2025 ACTUAL TOTAL USES FOR POTABLE AND NON-POTABLE WATER

DWR Table 4-1 Retail: 2025 Actual Total Uses for Potable and Non-Potable Water Water Code Section 10631(d)(1)			
Description	Additional Description	2025 Actual Water Use	
		Level of Treatment When Delivered	Volume (AF)
Single Family		Potable	3,033
Multi-Family		Potable	1,074
Commercial		Potable	688
	Recycled Water	Non-Potable	8
Institutional & Governmental	Government and SEJPA Supplemental Water	Potable	29
	Recycled Water	Non-Potable	8
Landscape		Potable	342
	Recycled Water	Non-Potable	690
Agricultural irrigation		Potable	102
	Recycled Water	Non-Potable	1
Losses		Potable	234
Subtotal Potable			5,502
Subtotal Non-Potable			707
TOTAL			6,209
NOTES: There is no additional potable water use for the water use sectors that are not listed above.			

FIGURE 4-1: CURRENT POTABLE WATER USE BY SECTOR (2025)



4.2.2 Basis for Demand Projections

Water use within the District has been projected for the next 25 years, in 5-year increments, in order to continuously assess the District's water supply and water use conditions and support future infrastructure planning, capital improvement plans, water revenue, and land-use planning.

The District's total demand projections were developed using baseline values consistent with recent water use trends in its service area. For 2030, the District incorporated anticipated growth from approximately 2,000 units, using an estimated 42 gallons per capita per day (GPCD) and 2.69 persons per household. 42 GPCD was selected to align with Senate Bill 1157, setting an indoor standard to 42 GPCD for efficient indoor water use. From 2030 forward, a 1 percent growth escalator was applied to each five-year planning increment through 2050 to account for ongoing population and housing growth. These adjustments ensure that the demand baseline reflects both observed usage data and projected development consistent with regional growth forecasts and regulatory requirements. This approach includes water projections based upon demographic and land use patterns, which is DWR's recommended approach for forecasting demands in UWMPs.

4.2.2.1 Water Savings from Codes, Plans, and Other Policies

Information developed includes both a baseline projected demand and a projected demand after implementation of active and passive conservation measures. In this context, passive conservation savings are derived from the implementation of various regulations and codes, and active conservation savings are those resulting from the implementation of demand management programs (refer to **Chapter 9 - Demand Management Measures).**

Water demand forecasts incorporate anticipated water savings from applicable state and local codes, standards, ordinances, and land use requirements to the extent information is available and relevant to District conditions. Baseline unit demand factors derived from recent customer use data were adjusted using professional judgment to reflect the continued effect of statewide efficiency requirements such as the Model Water Efficient Landscape Ordinance (MWELO), California Green Building Standards Code (CALGreen), and California Energy Commission Title 20 Appliance Efficiency Regulations (Title 20), and other water conservation measures that reduce indoor and outdoor water use over time through more efficient fixtures, appliances, and landscapes. The use of 42 GPCD described above indicates how passive conservation was incorporated into new development.

The District still needs active conservation in future years to meet the estimated additional reductions needed to achieve the District's Urban Water Use Objective (UWUO) compliance targets, including a 4% reduction by 2035 and 7% by 2040. The District's water use is shown in **Table 4-2**, with conservation to meet the UWUO from 2025-2050. The forecast assumes that a larger share of future demand reduction will result from active conservation efforts and demand management actions implemented to support compliance with UWUO requirements, while code-driven savings are reflected as ongoing background reductions in future demands.

TABLE 4-2: DEMAND FORECAST

Total Use of Potable, and Non-Potable Water - Projected					
	2030	**2035**	**2040**	**2045**	**2050**
Baseline M&I Demand	7,473	7,534	7,594	7,656	7,718
Baseline Agricultural Demand	130	130	130	130	130
Total Baseline Demand	7,603	7,664	7,724	7,786	7,848
Conservation	**1,200**	**1,454**	**1,647**	**1,648**	**1,648**
Net Total Water Demands	6,403	6,210	6,077	6,138	6,200
Local Supplies	0	0	2,430	2,430	2,430
Demand on Water Authority	6,403	6,210	3,647	3,708	3,770
NOTES: Units in AFY					

Local surface water from Lake Hodges is estimated to be unavailable from 2020 through 2035 due to improvements required at the Lake Hodges dam. While some local supply may be intermittently available during this period, the District took a conservative approach in its planning and assumed no production from Hodges when reporting to the wholesale agency. To meet demands during this time, the District will rely on purchases from the Water Authority. Once the improvements are completed, anticipated in 2040 around 2035, local surface water is expected to return to its full storage capacity, reducing demands on Water Authority by approximately 2,430 AF per year.

4.2.3 Demand Projections

Baseline future water demand for residential sectors is assumed to increase proportionately with population growth. However, in alignment with the state's Making Conservation a California Way of Life regulation, the District has an Urban Water Use Objective that requires overall water use reductions of 4% by 2035 and 7% by 2040. These conservation targets are incorporated into the projections shown in **Table 4-3**, resulting in a decrease in SFR water use per person despite overall population growth.

Non-residential water use is expected to remain consistent between 2025 and 2050 as commercial and industrial development are not expected to increase. Agriculture water use has decreased since 2015, as some agricultural land was converted to residential use. However, additional conversion is not expected, and agricultural water use is also projected to remain consistent between 2025 and 2050. Future water use projections by use sector from 2025-2045 are shown in **Table 4-3** and **Figure 4-2**.

TABLE 4-3: PROJECTED POTABLE WATER DEMANDS

DWR Table 4-2 Retail: Use for Potable and Non-Potable Water - Projected						
Use Type	Additional Description	Projected Water Use				
Description		**2030**	**2035**	**2040**	**2045**	**2050**
Single Family		3,654	3,460	3,314	3,361	3,410
Multi-Family		1,327	1,327	1,340	1,354	1,367
Commercial		688	688	688	688	688
Landscape		29	29	29	29	29
Institutional & Governmental		341	342	342	342	342
Agricultural & Irrigation		130	130	130	130	130
Losses		234	234	234	234	234
Total Potable		6,403	6,210	6,077	6,138	6,200
Total Recycled		700	700	700	700	700
Total Demand		7,103	6,910	6,777	6,838	6,900
NOTES: All projected water use is in AF.						

Historical and projected water use by sector, from 2020 through 2050, is shown in **Figure 4-2**. Total projected water use, from 2025 through 2050, with recycled water use separated, is summarized in **Table 4-4**. Recycled water projections were based on the average recycled water use from 2020 to 2024. Water reuse is assumed to remain reasonably constant in the near future no recycled water projects are currently in development. Recycled water use projections for the next 25 years are discussed in more detail in **Chapter 6 – Normal-Year Water Supply Characteristics.**

FIGURE 4-2: TOTAL HISTORICAL AND PROJECTED DEMAND

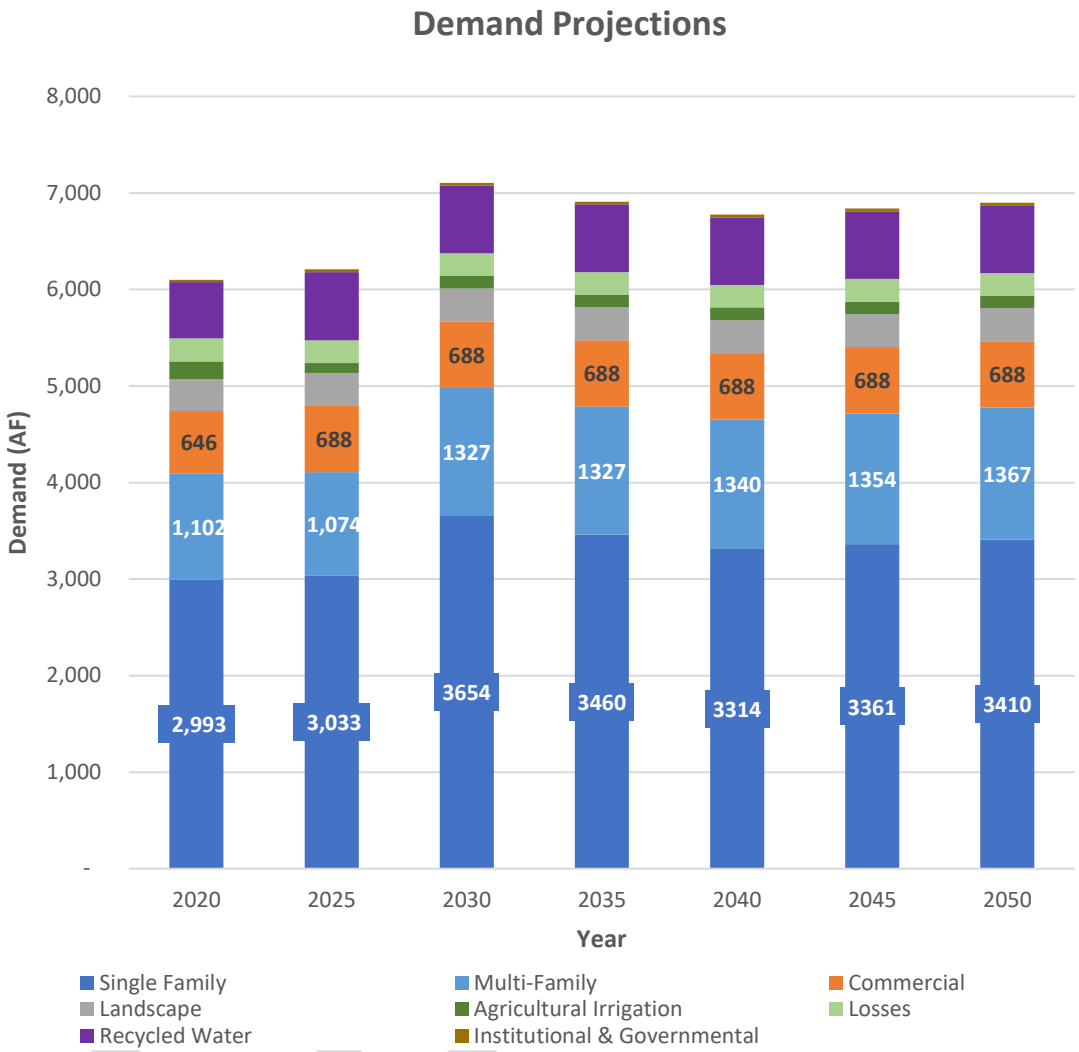


TABLE 4-4: PROJECTED TOTAL DEMAND

Total Gross Water Use (Potable and Non-Potable)						
	2025	2030	2035	2040	2045	2050
Potable and Raw Water *From Tables 4-1 and 4-2*	5,502	6,403	6,210	6,077	6,138	6,200
Recycled Water Demand *From Table 6-4*	707	700	700	700	700	700
TOTAL WATER DEMAND	6,209	7,103	6,910	6,777	6,838	6,900

4.3 Distribution System Water Losses

CWC Section 10631

> *(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…*
>
> *(J) Distribution system water loss…*
>
> > *(d)(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.*

Per the CWC Section 10631(d)(3)(a), the District is required to estimate its distribution system losses for each of the five years preceding the plan update. The District used water losses estimated during the preceding five years to project losses in 5-year increments for the future. Distribution system water losses can reflect the quality and efficiency of the District's system operations.

Distribution system water losses include real losses (i.e., system leakage) and apparent losses (i.e., customer metering inaccuracies), as estimated using the AWWA Water Audit Method. The District has a reliable water meter system and has kept good records on its water use data such that unmetered water use is negligible.

For each fiscal year, the District's total water losses (real plus apparent losses) were estimated by dividing the total water loss in AF, as reported in the District's audit, by the sum of potable water use of the remaining water use sectors. Using this method, the District's average water losses were estimated as 3.9%, 3.0%, and 3.5% of total demand in fiscal years 2020, 2021, and 2022, respectively, compared to 2.2% of total demand in fiscal year 2023. This reduction in water losses is largely due to several system water loss control measures that the District has implemented to minimize water losses. For example, the

District performs non-destructive testing of water mains regularly to assess the remaining life of the mains and detect leakage problems. The impacts of the District's water loss minimization efforts are expected to continue. Water losses for 2030-2050 were projected based on the average of 2020-2023 and calculated as 3.1% of the forecasted potable demand.

Table 4-5 summarizes the District's distribution system losses in fiscal years 2020 through 2024. The AWWA worksheets used to calculate the water losses for these fiscal years are provided in **Appendix D**. **Table 4-6** summarizes the water loss audit reporting.

TABLE 4-5: ANNUAL WATER LOSSES

Reporting Period Start Date (mm/yyyy)	Volume of Water Loss
07/2020	236
07/2021	174
07/2022	181
07/2023	113
07/2024	235
NOTES:	

TABLE 4-6: WATER LOSS AUDIT REPORTING – SUBMITTED REPORTS

DWR Table 4-5 Retail: Last Five Years of Water Loss Audit Reporting			
Public Water System ID # Reported in Table 2-1R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)	Link to Submittal
CA3710021	2020	Yes	FY2021
	2021	Yes	FY2022
	2022	Yes	FY2023
	2023	Yes	FY2024
	2024	Yes	FY2025
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports			
NOTES: All submittals available at https://wuedata.water.ca.gov/awwa_plans			

Pursuant to CWC Section 10631(d)(3)(C), retail suppliers are required to provide data demonstrating progress towards their State Water Board Water Loss Performance Standard for each applicable public water system. **Table 4-7** summarizes the District's progress.

Woodard & Curran

TABLE 4-7: WATER LOSS AUDIT REPORTING

Submittal Table 4-6 Retail: Progress Towards 2028 Water Loss Standard Water Code Section 10631(d)(3)(C)											
		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		
Public Water System ID	Did the Water Board Calculate a Water Loss Standard for this Public Water System?	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.											
CA3710021	Yes	11.8	Gallons per Service Connection per Day (GPSCD)	14382	78.8	4.9	3.9	Gallons per Service Connection per Day (GPSCD)	14382	155.8	9.7

4.4 Water Use for Lower Income Households

CWC 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.*

California Health and Safety Code 50079.5

> *(a)"Lower income households" means persons and families whose income does not exceed the qualifying limits for lower income families... In the event the federal standards are discontinued, the department shall, by regulation, establish income limits for lower income households for all geographic areas of the state at 80 percent of area median income, adjusted for family size and revised annually.*
>
> *(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.*

The District is located primarily within Encinitas. Based on 2023 American Community Survey (ACS) 5-year estimates and classifications from Encinitas Housing Element (April 2021), approximately 29% of households within Encinitas are considered low, very low, or extremely low income. Affordable housing units within the District are located in different designated zones, including Mixed Commercial, Single Family Residential, and Multi-Family Residential. The number of residential affordable housing units, single family and multi-family combined, was estimated as a proportion of the total number of housing units within the District's service area. This proportion is based on the percentage of low-income households in Encinitas, 29% as described above, and the estimated number of households as of 2025. Number of households was estimated by dividing the District's total population in 2025 (40,405) by the average number of persons per household for Encinitas (2.69) based on the latest census data, resulting in a total of 15,020 households. Therefore, the number of affordable housing units within the District, single-family and multi-family combined, was estimated as 4,355 in 2025, or 29% of the total households.

As discussed in **Chapter 3 – System Description** (Section 3.4), Encinitas General Plan prioritizes conserving, promoting, and expanding affordable housing. As such, Encinitas has proposed several affordable housing development projects which are anticipated to increase the number of affordable housing units within the District, single-family and

multi-family combined, by 2,000 units. However, not all these units will be low-income. Approximately 13% will be dedicated to low-income or very-low income, increasing the affordable housing units to a total of 4,601 units by the year 2029.

Actual water use in 2025 from single-family and multi-family residences within the District's service area totaled 4,107 AFY, or approximately 91 residential gallons per capita per day (R-GPCD). This includes both indoor and outdoor water use for residential properties, not including dedicated outdoor landscape metered use, as shown in **Table 4-1**. In 2030, water use from single-family and multi-family residences within the District's service area is projected to be 4,980 AFY as shown in **Table 4-3**, or approximately 99 R-GPCD. Minor changes in R-GPCD are related to indoor efficiencies, outdoor efficiencies, and weather. Multiplying the actual 2025 and 2030 projected per capita water uses (91 R-GPCD and 99 R-GPCD, respectively) by Encinitas household density of 2.69 persons per household results in a current and projected water use of approximately 244 and 267 gallons per household per day, respectively. Finally, current and projected demands for affordable housing units within the District's service area were estimated by multiplying the number of low-income households by the water use per household per day, as shown in **Table 4-8.**

TABLE 4-8: CURRENT AND PROJECTED DEMANDS FOR LOW-INCOME HOUSING

	Current (2025)	Projected (by 2030)
Number of Low-Income Housing Units	4,355	4,601
Per Capita Water Use (GPCD)	91	99
Low-Income Water Demands (AFY)	1,191	1,890

As indicated in **Table 4-9** water use projections for affordable housing units have been included in the projected water demands shown in **Section 4.2** of this chapter.

TABLE 4-9: PROJECTION COMPONENTS

DWR Table 4-3 Retail Only: 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? (Refer to Appendix K of UWMP Guidebook)	Yes
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.	Section 4.2 Water Uses by Sector; Section 4.2.2.1 Water Savings from Codes, Plans, and Other Policies
Are Lower Income Residential Demands Included In Projections?	Yes

4.5 Climate Change

CWC 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.*

CWC Section 10635(b)

> *Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment …(and) shall include each of the following … (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.*

Climate change is defined as the long-term change in weather patterns over a specific time period. Specifically, global warming refers to a type of rapid climate change that has occurred over the past 60 years and is anticipated to continue into the future. Climate change can have a potentially significant impact on water supply and water demand planning, as temperatures are expected to increase in already semi-arid regions like the District.

The Water Authority, the City of San Diego, and the County of San Diego formed a Regional Water Management Group (RWMG) to develop San Diego's Integrated Regional

Water Management Plan (IRWM Plan). The IRWM Plan objectives include developing long-term water reliability, improving water quality, and protecting natural resources. The RWMG coordinated with the District, other state and federal agencies, and local water agencies to develop and update the IRWM Plan, with the most recent update published in 2019. The IRWM Plan includes a Climate Change Planning Study completed in May 2013 that evaluates the adaptability of water management systems in the San Diego IRWM region to climate change. The study included a vulnerability analysis to identify the region's climate change issues. These vulnerabilities were prioritized to determine their level of adaptability.

With consideration of the prioritized climate change vulnerability issues identified in the IRWM Plan, the District has completed an IRWM Climate Change Vulnerability Assessment (Vulnerability Assessment) which is provided in **Appendix E**. This Vulnerability Assessment evaluates the potential impacts of climate change on different aspects, including water demand, water supply, water quality, sea level rise, flooding, ecosystem and habitat vulnerability, and hydropower. The Vulnerability Assessment focuses primarily on the water demand, water supply, and water quality elements. This section primarily discusses the vulnerability issues in water demand. Vulnerability issues in water supply are discussed in **Chapter 6 – Normal-Year Water Supply Characterization** (**Section 6.10**).

When California was experiencing the fourth consecutive year of drought in 2015, the District Board declared a Water Supply Shortage Response Level 3 Condition to restrict water use. In addition, the District approved other drought actions and water conservation programs to restrict certain water uses and reduce water consumption. In 2019, the District implemented additional water conservation activities such as sponsoring presentations and lab activities on water conservation in local schools and co-sponsoring various conservation workshops on landscape (totaling 200 attendees), rain barrels, and greywater. As of 2025, the District remains in Level 1 of its Water Supply Shortage Response, which includes investment in recycled water, upgrading indoor fixtures, efficient irrigation practices, and voluntary customer conservation measures.

The District's 2020 to 2025 monthly water use data show variations of between 70 and 148 AF for the past 5 year period with fluctuations in water usage year to year. The lowest water use occurs during the spring, especially the month of March, and the highest use occurs over the summer months into early fall, particularly August through October.

Based on the historical data, irrigation demand tends to increase with higher temperatures and less rainfall events. Crops grown within the District are climate-sensitive and therefore may require more irrigation. Climate change is expected to increase temperatures across the San Diego County region. The 2013 Climate Change Planning Study projects that

rainfall will vary across the region, some areas will receive between 35% less and 17% more rainfall, and storms may be less frequent but more intense. For the purposes of the District's long-term planning, annual irrigation demand projections were held constant to ensure a conservative and stable baseline for supply reliability analysis. While actual irrigation demand can fluctuate in response to droughts and climate variability—as reflected in Chapter 7—the modeling approach assumes that conservation measures and improved irrigation efficiency will offset potential increases in demand over time. This methodology allows for a straightforward comparison across planning scenarios and ensures that any short-term spikes in irrigation demand due to drought are considered through separate contingency analyses rather than being escalated annually within the baseline forecast.

5. SB X7-7, 2020 TARGETS, AND 2025 REPORTING

CWC 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.*

CWC Section 10608.12

> *(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.*

The Water Conservation Act of 2009, referred to as Senate Bill X7-7 (SB X7-7) required all urban water suppliers to increase their water use efficiency by reducing their per capita water use by 20 percent by the year 2020 compared to a calculated baseline. The methods used to determine the District's per capita baseline water use and demand target are described in the District's 2020 UWMP (Chapter 5).

This chapter includes the following sections:

- Compliance with Retail Supplier 2020 Per Capita Demand Target
- Regional Alliance

5.1 Compliance with Retail Supplier 2020 Per Capita Demand Target

The District is a supplier that met its 2020 Target in 2020. As shown in **Table 5-1**, the District's 2020 per capita demand target was calculated to be 151 GPCD. The District met its per capita demand target in 2020 with total water use equivalent to 129 GPCD. The SB X7-7 Verification Form and Compliance Forms were attached to the District's 2020 UWMP.

For 2025, the GPCD for the District is 141, which is still below the SB X7-7 2020 Target.

5.2 Regional Alliance

In addition to fulfilling its own SB X7-7 compliance requirements, the District collaborated in a Regional Alliance with Vallecitos Water District, Olivenhain Municipal Water District, and Rincon del Diablo Municipal Water District. This alliance was established under CWC Section 10608.28(a) and coordinated through the Water Authority. During the SB X7-7 reporting process, each participating agency documented its individual compliance, and a collective SB X7-7 target was developed for the Regional Alliance. This process and its outcomes are detailed in previous UWMPs. The District successfully met both its local and regional targets in 2020, submitting its compliance to the State based on its local SB X7-

7 target. As a result, no new Regional Alliance calculations are required for the 2025 UWMP.

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

DWR 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?	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	**Only for suppliers that did not meet the Target in 2020.**	
					Actual 2025 GPCD (From SB X7-7 compliance form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	151	129	Yes	NA	NA

DWR Notes: Suppliers calculating a 2025 GPCD will need to complete and submit SB X7-7 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.

6. NORMAL-YEAR WATER SUPPLY CHARACTERIZATION

The District is one of two water districts that serve Encinitas, which includes the communities of Old Encinitas, New Encinitas, Leucadia, Cardiff, and Olivenhain. The District provides potable water and recycled water to approximately 40,000 customers within its service area, while OWMD serves the rest of Encinitas. The District's water supply portfolio includes local surface water from Lake Hodges, purchased treated and raw water from the Water Authority, and recycled water produced by surrounding wastewater agencies with tertiary treatment. Each of these supplies are discussed in more detail throughout this chapter.

The District's water supply portfolio varies based on local climate conditions, which can significantly affect the proportion of local and imported water supplies. This chapter will not only describe the District's current water supply sources, but it will also discuss potential future sources of supply that could reduce the District's dependency on imported water from the Water Authority. The following sections are included in this chapter:

- Purchased or Imported Water
- Groundwater
- Surface Water
- Stormwater
- Wastewater or Recycled Water
- Desalinated Water Opportunities
- Exchanges or Transfers
- Future Water Projects
- Summary of Existing and Planned Sources of Water
- Climate Change Impacts to Supply
- Energy Intensity of Supplies

6.1 Purchased or Imported Water

CWC Section 10631(b)

> *Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier as described in subdivision (a) providing supporting and related information, including all of the following: …*
>
> *(2) When multiple sources of water supply are identified, a description of the management of each supply in correlations with the other identified supplies.*

The District joined the Water Authority in 1948 to acquire the right to purchase and distribute imported water throughout its service area. Membership in the Water Authority was essential because local potable water supplies (Lake Hodges) could not provide sufficient, reliable quantities to meet demands within the District's service area.

The District receives treated and raw water from its wholesale supplier, the Water Authority. The Water Authority has three primary sources of supplies including the SWP supplies purchased from the Metropolitan Water District of Southern California (MWD), Colorado River Aqueduct (CRA) supplies that are from long-term transfer agreements and purchased from MWD, and local supplies in the form of desalinated seawater and other member agency supplies. SWP supplies are entirely purchased from MWD, of which the Water Authority is a member agency. Over the last five years, the Water Authority has received about 2% of its water supplies via the SWP, which supplies water through the Sacramento-San Joaquin Bay Delta (Bay-Delta). The Bay-Delta is a large network of channels and islands that collect runoff from the Sierra Nevada; this water is conveyed to customers through California, including MWD.

On average, more than half of the Water Authority's supplies are sourced from the Colorado River. Colorado River supplies are either purchased from the MWD or supplied directly to the Water Authority through a long-term water conservation and transfer agreement (known as the Quantification Settlement Agreement or QSA) and through two canal-lining agreements. The Coachella and All-American Canal Lining Projects were constructed as part of a joint conservation effort between the Imperial Irrigation District (IID), the Water Authority, DWR, and the Bureau of Reclamation, and they currently provide 77,700 AFY of water to the San Diego region.

All of the District's imported raw water supplies, and its local surface water supplies from Lake Hodges, are treated at the Badger Plant, which is jointly owned by the District and SFID. The Badger Plant has the capacity to treat up to 40 million gallons per day (MGD), or approximately 44,835 AFY, though it typically treats approximately half this volume in a given year.

The District utilizes solely owned and jointly owned reservoirs to store its water supplies. The District is the sole owner of two underground treated water reservoirs with capacities of 7.5 million gallons (MG) and 2.5 MG, that are located within the District's service area. The District shares ownership of two additional reservoirs with SFID, including an 883 acre-foot (AF) raw water reservoir, known as the San Dieguito Reservoir, and a covered 13 MG treated water reservoir.

The balance between imported and local water supplies can vary based on drought conditions and constraints at Lake Hodges. For example, in 2015, District purchased 5,749 AF of imported water. In 2020, the District only imported 3,127 AFY of water. Due to the additional constraints on surface water from Lake Hodges, the District imported 4,613 AF of water in 2025.

The volumes of the District's actual imported water in 2025 and its projected imported water through 2050 are shown in **Table 6-8** and **Table 6-9** of this chapter, respectively.

6.2 Groundwater

CWC Section 10631(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:*
>
> > *(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…, any groundwater management plan adopted by the urban water supplier…, 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. 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…*
> >
> > *(C) 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.*
> >
> > *(D) 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.*

As shown in **Table 6-1** below, the District does not use groundwater to supply its service area. The District does not plan to develop its own groundwater supply sources at this time.

TABLE 6-1: GROUNDWATER VOLUME PUMPED FROM 2020-2025

DWR Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)						
☑	Supplier does not pump groundwater. The supplier will not complete the table below.					
Groundwater Type	Location or Basin Name	2021	2022	2023	2024	2025
TOTAL		0	0	0	0	0

6.3 Surface Water

The District sources surface water locally from Lake Hodges. Lake Hodges is located west of Interstate 15 and east of Olivenhain Reservoir within the San Dieguito River Watershed and is owned and operated by the City of San Diego. At 347 square-miles, Lake Hodges has the largest drainage basin of any surface water source in San Diego County. Lake Hodges covers approximately 1,234 acres and, without restriction, can hold up to 30,000 AF of water when full. The District and SFID jointly maintain rights to local surface water that flows into Lake Hodges. The City of San Diego also maintains rights to Lake Hodges inflow. The Water Authority has the right to store water in Lake Hodges but does not maintain rights to the local surface water inflow. Of the total 30,000 AF of storage capacity in Lake Hodges, the Water Authority has the right to store 20,000 AF and the City of San Diego has the right to store 5,000 AF. The District and SFID have the ability to use the remaining 5,000 AF of lake capacity for storage.

Through a 1966 agreement with the City of San Diego, the District and SFID could purchase an average of 7,500 AFY of raw water from Lake Hodges from the City of San Diego. In 1998, the original agreement was revised and the amount of water that could be purchased by the District was changed. The amount available for purchase was modified to half of the inflow into Lake Hodges after the completion of the Lake Hodges to Olivenhain Pipeline, which was part of the Lake Hodges Project. The Lake Hodges Project included construction of pipeline tunnels and pump stations to connect Lake Hodges to Olivenhain Reservoir and to the regional aqueduct system. Through the project, Lake Hodges became part of the Water Authority Emergency Storage Project, which supplies water to the San Diego region in the event of an interruption in imported water deliveries.

The current water rights agreement called "*Amendment to and Restatement of March 17, 1998 Agreement Between the City of San Diego, Santa Fe Irrigation District and San*

Dieguito Water District Regarding Lake Hodges" (refer to **Appendix F**) was completed in November of 2014. Pursuant to this agreement, the total agreed upon hydraulic yield to be shared between these three parties, is approximately 11,400 AFY. In any single year, 50% of the annual hydraulic yield is the shared property of the District and SFID, and the remaining 50% belongs to the City of San Diego. Therefore, in any single year, the District and SFID share rights to 5,700 AF of the water entering Lake Hodges, which represents 50% of the total hydraulic yield of 11,400 AFY. In addition, any surface water runoff in excess of 11,400 AFY is split between the District and SFID (50%) and the City of San Diego (50%). Furthermore, the District and SFID are entitled to share 50% of the total available diversion capacity to transfer water out of Lake Hodges during spill events, when the volume of water in Lake Hodges exceeds its storage capacity. The District and SFID have an agreement to split their shared 5,700 AFY hydraulic yield as follows: approximately 42.7% to the District and the remaining 57.3% to SFID. Thus, based on the agreed upon hydraulic yield allocations, the District has rights to 2,434 AFY of storage capacity within Lake Hodges, or 21.3% of the total inflow into the lake. Regarding annual costs, the District has agreed to pay 25% of both the operation and maintenance costs and capital costs associated with Lake Hodges.

The percentage of local surface water that makes up the District's total water supply portfolio varies depending on climatic conditions. For example, the 2012 to 2017 drought significantly reduced the hydraulic yield from Lake Hodges. The proportion of the District's supplies from local surface water dropped to less than 16%, or 1,136 AFY in 2014, and to less than 9%, or 603 AFY, in 2015. When the drought ended in 2017, the District's water supply from Lake Hodges increased. In 2020, the District's Lake Hodges supply was 2,555 AFY. However, in 2025 that number was 1086 AFY.

A new supply constraint has temporarily limited the District's local surface water supply allocation from Lake Hodges. Due to dam performance and safety deficiencies, including dam deterioration, spillway condition, structural stability, emergency drawdown capability, and instrumentation for monitoring dam safety, DWR's DSOD temporarily lowered the maximum allowable water level in Lake Hodges by 20 feet or more until the dam is repaired or replaced, resulting in a reduction of the ability to capture local water. As of February 2, 2023, this restriction states that the water level in Lake Hodges reservoir should not exceed 280 feet above sea level. The City of San Diego owns and is in charge of Lake Hodges Dam and is leading the effort to repair or replace the dam, but the project is not expected to be completed until 2040. As a result, the District and SFID's shared water rights have been temporarily reduced. Full capture of local water rights is expected to return once the dam repair/replacement is completed.

As discussed in **Section 6.1**, the District and SFID jointly own and operate the Badger Plant, where local water supplied from Lake Hodges and imported raw water purchased from the Water Authority is treated. In general, local Lake Hodges water is more challenging to treat than imported water due to water quality issues associated with urban and agricultural runoff. Recent projects have improved water quality in Lake Hodges, including a constructed wetland that captures and treats urban runoff, and a deep-water aeration system that helps reduce low-oxygen conditions in the lake. Lake Hodges water is conveyed to the District's San Dieguito Reservoir, which has 883 AF of storage capacity, where some pre-treatment takes place prior to delivery to the Badger Plant. Enhancements to the Badger Plant and San Dieguito Reservoir have improved the ability to treat water under more challenging conditions and have increased the ability to use this local water supply instead of imported water. In 2020 nearly 45% of water came from local sources and, although in 2025 that number was approximately 20%, it expected to rebound once the Lake Hodges Dam repairs are completed in 2040

6.4 Stormwater

The District does not utilize stormwater directly as part of its water supply portfolio. It purchases recycled water from the San Elijo Water Reclamation Facility (SEWRF), which has a stormwater recovery system that contributes to its recycled water supplies. The SEWRF is located in Cardiff and is owned and operated by SEJPA. The stormwater recovery system has recovered approximately 5 AFY of urban runoff for treatment at the SEWRF. The SEJPA is working to expand its capacity to collect stormwater which is anticipated to lead to increased stormwater recovery in the future.

6.5 Wastewater and Recycled Water

The District has supplied recycled water to its customers since August of 2000 and currently purchases approximately 650-700 AFY of recycled water in an effort to reduce its dependence on imported water. The District purchases its recycled water from the SEWRF, which is equipped with tertiary facilities to treat wastewater for recycled water use. Wastewater within the District's service area is collected by three agencies: the Encinitas Sanitary Division (ESD), the Leucadia Wastewater District (LWWD), and the Cardiff Sanitary Division (CSD). The collected wastewater from ESD and LWWD is delivered to and treated at the Encina Water Pollution Control Facility (EWPCF). The collected wastewater from CSD is delivered and treated at the SEWRF. Some of the wastewater treated from CSD is used as recycled water, while the remainder is discharged to an ocean outfall.

6.5.1 Recycled Water Coordination

CWC 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…*

Wastewater within the District is collected by three sanitary agencies:

- Encinitas Sanitary Division (ESD) of the City of Encinitas
- Leucadia Wastewater District (LWWD)
- Cardiff Sanitary Division (CSD) of the City of Encinitas

Wastewater collected within the District is treated at two treatment facilities:

- San Elijo Water Reclamation Facility (SEWRF) from CSD
- Encina Water Pollution Control Facility (EWPCF) from ESD and LWWD

The SEWRF treats over 50% of the wastewater it receives, which includes other potable water and wastewater service areas, to tertiary standards for recycled water use. The District purchases recycled water treated at the SEWRF.

The EWPCF pumps a small portion of treated secondary effluent from the City of Carlsbad and LWWD from the EWPCF to two water reclamation facilities for further treatment:

- Carlsbad Water Recycling Facility (Carlsbad WRF) for Carlsbad Municipal Water District
- Gafner Water Recycling Facility (Gafner WRF) for LWWD

6.5.2 Wastewater Collection, Treatment, and Disposal

CWC Section 10633

> *(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.*

CWC Section 10633

(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.

The District provides potable water and recycled water primarily to communities in Old Encinitas, Leucadia, Cardiff, and portions of New Encinitas. Wastewater from these areas is collected by ESD, CSD, and LWWD. Wastewater collected in the District's service area is treated at the EWPCF, owned and operated by Encina Wastewater Authority (EWA), and the SEWRF, owned and operated by the SEJPA. Secondary treated wastewater from the City of Carlsbad and LWWD is conveyed to Carlsbad WRF for Carlsbad Municipal Water District and Gafner WRF for LWWD, for tertiary treatment, and used for recycled water.

Encinitas Sanitary Division (ESD)

The ESD, a division of Encinitas, serves approximately 17,000 residents within a 3 square-mile service area. ESD's service area covers the west-central portion of Encinitas, including the communities of Old Encinitas, portions of Leucadia, and New Encinitas. There are approximately 39 miles of sewer mains and 475 manholes in the ESD's collection system. Wastewater collected by ESD is generated primarily from residential users and some light commercial users within the downtown area. Approximately one-third of wastewater within the District's service area is collected by ESD and delivered to the EWPCF for treatment.

Cardiff Sanitary Division (CSD)

The CSD, a division of Encinitas, serves approximately 20,000 residents within an 8.3 square-mile service area. CSD's service area covers the southern and eastern portions of Encinitas, including the communities of Cardiff, Olivenhain, portions of the Rancho Santa Fe Community Services District, and portions of the City of Solana Beach. There are approximately 82 miles of sewer mains and 1,600 manholes in the CSD's collection system. Wastewater collected by the CSD is generated primarily from residential units and some light commercial users such as stores, restaurants, offices, and medical buildings, including Scripps Hospital. Approximately one-third of wastewater from the District's service area is collected from CSD and pumped or conveyed to the SEWRF for treatment.

Leucadia Wastewater District (LWWD)

The LWWD, a member of the Encina Joint Powers Authority (JPA), serves a 16 square-mile service area that covers the remaining portions of Encinitas, including communities in Leucadia, New Encinitas, La Costa, and Carlsbad. LWWD collects approximately one third of wastewater from the District's service area, which is then pumped or conveyed to the

EWPCF for treatment. LWWD owns approximately 20% of the treatment capacity at the EWPCF, or approximately 8,070 AFY, and also owns and operates the Gafner WRF to treat secondary effluent from the EWCPF to tertiary standards for recycled water use. LWWD transports an average of approximately 5,040 AFY (4.5 MGD) to the EWPCF.

Encina Wastewater Authority (EWA)

The EWA is a joint powers authority that operates and maintains the EWPCF, an ocean outfall, a biosolids facility, and two lift stations, located in Carlsbad. EWA is owned by six public agencies governed by a Joint Powers Agreement, under which owners share in the operational and management costs of the EWPCF. The six member agencies of EWA are the City of Vista, City of Carlsbad, Buena Sanitation District, Vallecitos Water District, City of Encinitas, and LWWD. Each EWA member agency is assigned a portion of the treatment system's capacity. The City of Encinitas, through its Sanitary Division, is allocated approximately 2,018 acre-feet per year (1.8 MGD) of wastewater capacity at the Encina Water Pollution Control Facility and ocean outfall. The system can accommodate higher flows during peak conditions.

Encina Water Pollution Control Facility (EWPCF)

The EWPCF provides full secondary treatment, sludge handling, and disposal through a deep ocean outfall. Some treated secondary effluent generated by the City of Carlsbad and LWWD at EWPCF is delivered to either the Carlsbad WRF or the Gafner WRF for further treatment to tertiary standards for recycled water use. The EWPCF is a wastewater treatment plant that uses a standard biological treatment process. It can treat about 45,400 AFY (40.5 MGD) of wastewater and handle about 48,500 AFY (43.3 MGD) of solids generated during treatment. The EWPCF produces about 5,600 AFY (approximately 5 MGD) of recycled water onsite, which is used in the plant in lieu of purchased potable water. The recycled water is used for washing down equipment, irrigating landscaping, co-generation engine cooling, and odor control.

Carlsbad Water Recycling Facility Reclamation Plant (Carlsbad WRF)

EWA staff operate the Carlsbad WRF for the Carlsbad Municipal Water District, which is located adjacent to the EWPCF. Secondary effluent from the Encina WPCF is diverted from the ocean outfall and delivered to the Carlsbad WRF for tertiary treatment. The construction of this approximately 4,480 AFY (4 MGD) recycled water plant was completed in 2005, and the plant was later upgraded to handle approximately 7,840 AFY (7 MGD) as part of an expansion project completed in November 2016. The Carlsbad WRF supplies recycled water to the southwestern part of the City of Carlsbad.

Gafner Water Recycling Facility (Gafner WRF)

The Gafner WRF is owned and operated by the LWWD. As LWWD's service area population grew, it joined the Encina Joint Powers Authority in 1971 and became a partial owner of the EWPCF. In 1993, the LWWD upgraded Gafner WRF to meet new regulatory standards for recycled water. LWWD opted to decommission the original primary and secondary facilities in 1997 and began piping treated secondary effluent from the EWPCF to the Gafner WRF. The Gafner WRF has a total production capacity of up to 1.0 MGD (1,120 AFY). However, it currently produces 80-100 MG of recycled water per year (672 AFY) to meet demand to irrigate the southern portion of the Omni La Costa Resort & Spa Golf Course, which is located in Carlsbad, outside of the District's service area boundary.

San Elijo Joint Powers Authority (SEJPA)

The SEJPA is a joint powers authority that owns and operates the SEWRF located in Cardiff. The SEJPA also operates and maintains nine wastewater lift stations and shares ownership of the San Elijo Ocean Outfall with the City of Escondido. The SEJPA serves an approximately 19 square-mile area across the City of Solana Beach, portions of the City of Encinitas, portions of the City of Del Mar, and community of Rancho Santa Fe. The member agencies of the SEJPA include the City of Encinitas and the City of Solana Beach. Each SEJPA member agency has 50% treatment capacity in SEWRF. The Rancho Santa Fe Community Services District leases 280 AFY (0.25 MGD) capacity and the City of Del Mar leases 672 AFY (0.60 MGD) capacity. The SEWRF has a capacity of 5,885 AFY (5.25 MGD); therefore, Encinitas – Cardiff Sanitary Division is allowed to deliver 2,802 AFY (2.2 MGD) of wastewater to the plant for treatment.

San Elijo Water Reclamation Facility (SEWRF)

The SEWRF has the capacity to treat and discharge up to 3.02 MGD (or 3,385 AFY) of tertiary treated wastewater to recycled water users and up to 5.25 MGD (or 5,885 AFY) of secondary treated wastewater to the Pacific Ocean through the San Elijo Outfall, 1.5 miles offshore. The SEWRF collects primarily domestic wastewater from an approximately 19 square-mile area across the City of Solana Beach, and portions of Encinitas, the City of Del Mar, and the community of Rancho Santa Fe. Influent wastewater is conveyed to the WRF through three force mains and one gravity main. Flow from Cardiff enters the WRF from the north and west; flow from Solana Beach enters the WRF from the south; and flow from the east is conveyed to the WRF through the Olivenhain force main. Wastewater flows from each influent force main are metered and recorded separately before the influent streams are combined and discharged into an influent junction box.

The plant's advanced (tertiary) treatment facilities were completed in August 2000 and can produce up to 7.61 acre-feet per day of recycled water that meets California Title 22 standards for safe reuse. This water is typically used for irrigation, landscaping, and other non-potable uses. In 2013, Microfiltration (MF) and Reverse Osmosis (RO) were added to the plant's tertiary treatment processes and the plant's recycled water production capacity increased to 9.27 AF per day. The SEWRF produces approximately 1,500 to 1,700 AFY of recycled water.

Recycled water produced by the plant's tertiary facilities is sold to the District, SFID, the City of Del Mar, and OWMD. The District's 0.6 MG Oak Crest Park Reservoir is used to store recycled water.

Wastewater that is not recycled through the tertiary treatment process is discharged to the Pacific Ocean through the 8,000-foot-long San Elijo Ocean Outfall. The SEJPA discharges approximately 1,645 AFY of secondary effluent to the ocean outfall, which is approximately 50% of the current influent flow.

Table 6-2 summarizes the wastewater collected within the District's service area by each sanitary agency. The District does not treat its wastewater directly to tertiary standards for recycled water. Instead, wastewater collected within the District's service area is combined with wastewater from other areas outside of its service area, such as the Cities of Carlsbad and Solana Beach, and is treated at different treatment plants. **Table 6-2** and **Table 6-3** summarize the wastewater treated and discharged from each treatment facility.

TABLE 6-2: WASTEWATER COLLECTED WITHIN SERVICE AREA (2025)

DWR Table 6-2 Retail: Wastewater Collected Within Service Area in 2025					
☐	There is no wastewater collection system. The supplier will not complete the table below.				
100	Percentage of 2025 service area covered by wastewater collection system *(optional)*				
100	Percentage of 2025 service area population covered by wastewater collection system *(optional)*				
Wastewater Collection			**Recipient of Collected Wastewater**		
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated?	Volume of Wastewater Collected from UWMP Service Area 2025	Name of Wastewater Treatment Agency Receiving Collected Wastewater	Name of Wastewater Treatment Plant (WWTP) and Place ID Number	Is WWTP Located Within UWMP Area?
Cardiff Sanitary Division (CSD)	Estimated	1093	San Elijo Joint Powers Authority (SEJPA)	San Elijo Water Reclamation Facility (SEWRF)	Yes
Encinitas Sanitary Division (ESD)	Estimated	843	Encina Wastewater Authority (EWA)	Encina Water Pollution Control Facility (EWPCF), Place ID 222758	No
Leucadia Wastewater District (LWWD)	Estimated	283	Encina Wastewater Authority (EWA)	Encina Water Pollution Control Facility (EWPCF), Place ID 222758	No
Total Wastewater Collected from Service Area in FY 2025:		2,219			
NOTE: Values are reported for Fiscal Years and in units of AF.					

TABLE 6-3: WASTEWATER TREATMENT AND OUTCOMES WITHIN UWMP SERVICE AREA (2025)

DWR Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area in 2025 Water Code Section 10633(a)													
Wastewater Treatment Plant Name and Place ID Number **Drop down list**	2025 Volume	Total 2025 Volume of Water Treated	**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	Volume	Treatment Level	Volume	Treatment Level	Volume	Treatment Level	Volume	Treatment Level	Volume	Name of other entity
	AF			AF		AF		AF		AF		AF	
San Elijo Water Reclamation Facility (SEWRF)	1,093	3,428	Tertiary	690	Tertiary	0	Secondary, Undisinfected	1695	N/A	0			
Encina Water Pollution Control Facility (EWPCF), Place ID 222758	843	28,261	Tertiary	0	Tertiary	0	Secondary, Undisinfected	26,933	N/A	0	Secondary, Undisinfected	5,093	Carlsbad Water Recycling Facility (City of Carlsbad), Gafner Water Recycling Facility (Leucadia Wastewater District)

DWR Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area in 2025 Water Code Section 10633(a)													
Total	1,963	31,689		690		0		26,268		0		5,093	

Notes: These plants treat wastewater generated outside of the UWMP service area

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.

6.5.3 Recycled Water System

CWC Section 10633

> *(c) Describe the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use.*

The District's wastewater is treated at the SEWRF and the EWPCF. The District purchases recycled water from SEJPA to supply its customers as discussed in Section 6.1. SEJPA is responsible for the operation and maintenance of the recycled water treatment plant and the distribution system up to the point of delivery, and the District is responsible for recycled water metering and customer billing.

Secondary treated wastewater from the City of Carlsbad and LWWD is conveyed to Carlsbad WRF for Carlsbad Municipal Water District and Gafner WRF for LWWD for tertiary treatment and used for recycled water.

The tertiary treated water is sold by LWWD to the southern portion of the Omni La Costa Resort & Spa Golf Course for irrigation purposes. The resort is located within the City of Carlsbad, outside of the District's service area. The agencies that are involved in the recycled water system collection, treatment, and distribution processes are described in Section 6.1 above.

A map of the Recycled Water System infrastructure within the District's service area is included as **Figure 3-2** in **Chapter 3 – System Description** (Section 3.2).

6.5.4 Potential, Current, and Projected Recycled Water Uses

CWC Section 10633

> *(d) Describe and quantify 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 determine the technical and economic feasibility of serving those uses.*

CWC Section 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 [describe] the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.*

Currently, the District provides recycled water to the Encinitas Ranch Golf Course, landscaped traffic medians, homeowner association (HOA) common areas, and a number

of parks within Encinitas. In 2025, The District supplied 707 AF of recycled water to its customers. **Table 6-3** provides the current and projected beneficial use information for recycled water deliveries within the District's service area. In order to be conservative regarding water demand and supply projections, **Table 6-4** only reflects current recycled water usage in the District's service area as supplied by the SEWRF. As described later in this Chapter (refer to Section 6.8), the District is actively pursuing near and long-term expansion of recycled water and other water supplies (potable reuse). Give the uncertainty relating the timeline to completing these projects the District is projecting that recycled water demands will at least remain at a consistent 700 AFY through 2045 for the purposes of this UWMP.

TABLE 6-4: CURRENT AND PROJECTED RECYCLED WATER DIRECT BENEFICIAL USES WITHIN SERVICE AREA

DWR Table 6-4 Retail: Current and Projected Recycled Water Direct Beneficial Uses Within Service Area										
Name of Agency Producing (Treating) the Recycled Water:			San Elijo Joint Powers Authority							
Name of Agency Operating the Recycled Water Distribution System:			San Elijo Joint Powers Authority							
Supplemental Water Added in 2025			2.63 AF							
Source of 2025 Supplemental Water			San Dieguito Water District							
Beneficial Use Type	General Description of 2025 Uses	Potential Beneficial Uses of Recycled Water		2025	2030	2035	2040	2045	2050	Potential Recycled Water Use Volume
Agricultural irrigation		Greenhouses		1						N/A
Landscape irrigation (excludes golf courses)	Medians, City parks, schools, HOAs	Business parks, HOAs, multi-family housing		388	400	400	400	400	400	90
Golf course irrigation	Encinitas Ranch Golf Course	N/A		318	300	300	300	300	300	N/A
			Total:	707	700	700	700	700	700	
NOTES: Volumes reported are in acre-feet and for Fiscal Years.										

According to the California Code of Regulations (CCR), Title 22, Section 60301.200, landscape irrigation includes irrigation of streetscapes, residences, parks, schools, cemeteries, churches, slope protection, or public facilities. The District provides recycled water to most of the sectors mentioned above.

6.5.5 Current Uses

CWC Section 10633

> *(b) A description the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.*

The District irrigates areas along freeway and road medians with recycled water. The Interstate 5 corridor through Encinitas has been converted to recycled water use by California Department of Transportation (CalTrans). Various road medians within Encinitas are also using recycled water as their source of irrigation. The District continues to conditionally approval of Encinitas projects with use of recycled water for irrigation.

City parks and school yards have also converted to recycled water use, such as Encinitas Paul Ecke Sports Park and the Encinitas Community Park. The Encinitas Community and Senior Center, completed in 2001, incorporated recycled water for landscape irrigation. The San Diego Botanic Garden on Quail Gardens Drive is one of the District's most important and earliest recycled water users; for the past 15-20 years, the garden has utilized recycled water to successfully grow special plants that are very sensitive to water quality. Schools within the District, including the San Dieguito Academy High School, Ocean Knoll Elementary School, Oak Crest Middle School, Sunset Continuation School, and the Ada Harris Elementary School have also converted their field areas to irrigate with recycled water. Additionally, the District has converted commercial land use landscape areas and HOAs to recycled water use. The many commercial areas within the Saxony Road service line utilize recycled water for their landscaped areas as well as various HOAs.

Golf course irrigation has been classified as a separate category from landscape irrigation. The Encinitas Ranch Golf Course (ERGC) is the only golf course within the District and has been irrigating with recycled water since 2000. The ERGC is the largest user of recycled water, with a demand of approximately 300 AFY. The ERGC pumps the recycled water that is used for irrigation from storage in a feature pond on the golf course.

6.5.6 Potential and Projected Uses

CWC Section 10633

(d) [Describe and quantify] 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 determine the technical and economic feasibility of serving those uses.

CWC Section 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 [describe] the actual use of recycled water in comparison to uses previously projected pursuant to this subdivision.

The District will explore opportunities to expand its recycled water through conversion of existing potable water customers to recycled water and exploring opportunities for economically feasible alternative reuse water supplies. In 2017, the District worked with the SEJPA on a recycled water main extension that allowed the Encinitas Ranch HOA to convert their communal area landscaping to use recycled water (approximately 50 AFY). Several other existing potable water customers located adjacent to recycled water mains have been identified by the District as good candidates for conversion to recycled water. Between 2015 and 2020, the District converted some of these customers to recycled water, including Silverado Senior Living and Quail Park HOA which together used 5 AF of recycled water in 2020. New housing projects near existing recycled water mains will use recycled water for landscaping. The Fox Point Farms community, which consists of approximately 250 condominiums and townhomes, is nearing completion in 2026. The landscaping at Fox Point Farms uses recycled water for irrigation. In the next five years, the District anticipates the Sunshine Gardens multi-family and Dos Lunas multi-family projects to be completed with both developments using recycled water for irrigation.

The 2025 Recycled Rate Study conducted by SEJPA estimated the District's recycled water demand would total 690 AF in 2025, of which 266 AF is designated as the minimum purchase requirement by the Encinitas Ranch Golf Authority. The study projects that the District demands could increase to 743 AFY by 2030, of which 295 AF is designated as the future minimum purchase requirement by the Encinitas Ranch Golf Authority. Based on recent use data, the District projects its recycled water demand will remain at 700 AFY between 2025 through 2050.

In the 2020 UWMP, the District projected 730 AFY of recycled water use in 2020 compared to the actual recycled water use of 707 AFY in 2025, which was 3% less than what was projected. **Table 6-5** compares the 2020 recycled water use projection for 2025 with the actual recycled water use for 2025 based on use type. Actual recycled water demand may have been lower than projections because of overall water use efficiencies in landscape and golf course irrigation practices.

TABLE 6-5: COMPARISON BETWEEN 2020 AND 2025 RECYCLED WATER USE PROJECTIONS

DWR Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual		
Use Type	2020 Projection for 2025	2025 Actual Use
Agricultural irrigation	0	1
Landscape irrigation (excludes golf courses)	400	318
Golf course irrigation	300	388
Total	700	707

6.5.7 Actions to Encourage and Optimize Future Recycled Water Use

CWC Section 10633

> *(g) [Provide] 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.*

The District and SEJPA have offered several incentives in an attempt to attract new recycled water customers, including eliminating capacity fees for recycled water meters, and offering low-interest loans and guaranteed supply during droughts. **Table 6-6** discuss methods the District will explore to expand recycled water use in the future.

The Recycled Water Optimization and Expansion Study (SEJPA, 2005), identified several recycled water system improvements to enhance SEJPA's ability to produce and distribute additional recycled water. The improvements identified added flexibility and improved system reliability, thus making recycled water conversion more attractive to customers.

The SEWRF, discussed in **Section 6.1**, had an initial capacity of approximately 2,242 AFY when it was first put online in 1966 and has been upgraded to currently treat up to 3,385 AFY of recycled water. The SEWRF performed a facility condition assessment in 2015 which found the recycled water facilities to be in fairly good condition and recommended a few upgrades to the Advanced Water Purification (AWP) facility and the recycled water distribution pumps to ensure proper operation and production of high-quality recycled water.

Recommended improvements to the AWP facility included installation of additional membranes within the reverse osmosis (RO) system to increase treatment capacity by

approximately 560 AFY. The RO system consists of modular units (commonly referred to as "skids") that use membrane filtration to remove salts and other impurities, thereby improving water quality and increasing production capacity.

The condition assessment also identified potential improvements to increase the capacity of the chlorine contact basin (CCB) and to evaluate additional on-site storage for recycled or future potable water supplies to support potential future projects such as potable reuse or brackish water treatment facilities. These recommended improvements are currently on hold pending future evaluation.

TABLE 6-6: METHODS TO EXPAND FUTURE WATER USE

DWR Table 6-6 Retail: Methods to Expand Future Recycled Water Use			
☐	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
Section 6.1.5	Provide page location of narrative in UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Incentives for Recycled Water Customers	Offer incentives such as low recycled water price, no capacity fees on recycled water meters, low-interest loans, etc. to attract more recycled water customers	2025-2035	50
		Total	50

6.6 Desalinated Water Opportunities

CWC Section 10631

> *(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.*

On December 14, 2015, a 50 MGD seawater desalination plant, the Claude "Bud" Lewis Carlsbad Desalination Plant, (Carlsbad Desal Plant) at the Encina Power Station became operational in the City of Carlsbad. The Water Authority approved a 30-year Water Purchase Agreement to purchase up to 56,000 AFY of desalinated seawater from the Carlsbad Desal Plant. In 2025, the Water Authority purchased 33,432 AF of desalinated water. During any normal year between 2025 and 2050, the Water Authority projects it will purchase approximately 42,000 AF of desalinated water. The District purchases water from the Water Authority, which includes desalinated seawater (blended with other Water Authority supplies) but does not plan to directly purchase desalinated water at this time.

6.7 Exchanges or Transfers

CWC Section 10631

> *(c) Describe the opportunities for exchanges or transfers of water on a short- term or long-term basis.*

The District maintains emergency interconnections and agreements with OMWD and SFID to enhance supply reliability under emergency conditions. The District does not regularly exchange or transfer water to other agencies.

6.8 Supply From Storage

The District does not rely on dedicated storage as an independent source of water supply. Surface water storage available to the District is described in Section 6.3 and is incorporated into the District's overall supply portfolio and reliability analysis.

Water stored in these facilities is not treated as a separate supply source, but rather as part of the management and timing of available supplies. Accordingly, no additional supply from storage is identified beyond the sources described in Section 6.3.

6.9 Future Water Projects

CWC Section 10631

> *(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… 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.*

Future water projects that affect the District's supply include the Encina Wastewater Authority Potable Reuse project and the Lake Hodges Dam improvements. Future water projects are categorized as in progress, planned, verifiable, or conceptual supplies. "Verifiable" projects are those with substantial evidence and adequate documentation regarding implementation and supply use, while "conceptual" projects are those considered to be in the pre-planning and pre-feasibility analysis phases. The Encina Wastewater Authority Potable Reuse project is categorized as "conceptual" and has not progressed to a point where the project yield can be factored into reliability assessments or uncertainty planning for this 2025 UWMP. Currently, no projects fall into the planned or verifiable categories. The Lake Hodges Dam improvements are currently in progress and the estimated impacts to supply and demand have been factored into this 2025 UWMP.

Encina Wastewater Authority Potable Reuse Project (Conceptual): The EWA had identified a potential project to develop a potable reuse project focused on the beneficial reuse of effluent from the EWPCF in the City of Carlsbad. EWA completed an initial water reuse feasibility study in 2018 (*Encina Wastewater Authority Water Reuse Feasibility Study)* and, based on the results, developed the *Encina Wastewater Authority Potable Reuse Strategic Plan* in May 2025. The District is a subsidiary of Encinitas, which is a member agency of EWA.

EWA's wastewater flows and facilities represent an opportunity for large scale production of purified recycled water suitable for potable reuse. The EWPCF has key assets available for production of purified water such as an ocean outfall, available land for advanced treatment, treated secondary effluent, and technically capable staff. With identified improvements to the EWPCF and construction of an advanced water treatment facility (AWTF), EWA facilities could support an estimated 18,000 to 22,000 AFY of purified recycled water (see *Encina Wastewater Authority Water Reuse Feasibility Study*), approximately 2,000 AFY of which is noted as potential SDWD supply. As of 2025, EWA's most favorable project options include surface water augmentation to Lake Hodges, raw water augmentation to Second Aqueduct, and treated water augmentation to the Carlsbad Desalination pipeline.

In 2021, EWA launched a 3-year pilot project to optimize the proposed EWPCF treatment train improvements for a future full-scale beneficial reuse project. This pilot project also served to collect regular water quality and process data and to familiarize the EWA operation staff with advanced treatment operations. No primary lead for future planning and implementation activities has been identified at the time of this 2025 UWMP and the project is currently on hold.

Hodges Dam Improvements (In Progress): As discussed in **Section 6.3**, the Lake Hodges Reservoir storage capacity has been temporarily reduced due to the seismic downgrading of the dam. For safety reasons, the California DOSD enacted a restriction on September 4, 2019 that water level at Hodges Reservoir should not exceed 295 feet, 20 feet below spillway elevation. As of February 2, 2023, this restriction has changed such that the water level should not exceed 280 feet above sea level. The City of San Diego is performing a condition assessment and seismic stability analysis of the Lake Hodges dam to implement dam performance and safety improvements. The impact of this planned dam improvement/ upgrade project on supply and demand is already accounted for in **Table 6-9** and therefore is not included in **Table 6-7.**

TABLE 6-7: EXPECTED FUTURE WATER SUPPLY PROJECTS OR PROGRAMS

DWR Table 6-7 Retail: Expected Future Water Supply Projects or Programs	
☑	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.
Section 6.8	Provide page location of narrative in the UWMP
NOTES: A conceptual potable reuse (IPR) project [Encina Wastewater Authority Potable Reuse Project is being explored and may provide up to 2,000 AFY of additional local water supply to the District in the future, thereby reducing the District's annual demands on the Water Authority by approximately 2,000 AFY.	

6.10 Summary of Existing and Planned Sources of Water

CWC Section 10631

> *(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 10631(a)...*

The District provides potable water and recycled water to its customers. Potable water sources include imported treated and raw water purchased from the Water Authority and local surface water from Lake Hodges. Imported raw water and surface water from Lake Hodges are treated at the R.E. Badger Filtration Plant. The District purchases recycled water from the SEJPA. **Table 6-8** summarizes the actual source and volume of water for 2025.

TABLE 6-8: ACTUAL WATER SUPPLIES (2025)

DWR Table 6-8 Retail: Water Supplies — Actual				
Water Supply		2025		
Description	Additional Detail on Water Supply	Actual Volume	Water Type	Total Right or Safe Yield *(optional)*
Purchased or Imported Water		4,613	Potable	
Surface Water		1,086	Potable	
Supply from Storage		0	Potable	
Recycled Water		707	Non-Potable	
Total		6,406		

Table 6-9 summarizes the projected source and volume of water for 2030 through 2050. In order to be conservative regarding water demand and supply projections, **Table 6-9** does not include the Encina Wastewater Authority Potable Reuse Project because it has not progressed beyond the conceptual phase. As demands increase, the District is able to purchase additional water from the Water Authority to meet demands not met with local supplies. Between 2040 and 2050, the District anticipates its total water supply will increase.

TABLE 6-9: PROJECTED WATER SUPPLIES (2030-2050)

DWR Submittal Table 6-9 Retail: Water Supplies — Projected										
Description	2030		2035		2040		2045		2050	
	Reasonably Available Volume	Total Right or Safe Yield *(opt.)*	Reasonably Available Volume	Total Right or Safe Yield *(opt.)*	Reasonably Available Volume	Total Right or Safe Yield *(opt.)*	Reasonably Available Volume	Total Right or Safe Yield *(opt.)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*
Purchased or Imported Water	6,403		6,210		3,647		3,708		3,770	
Local Supply	0		0		2,430		2,430		2,430	
Recycled Water	700		700		700		700		700	
Total	7,103		6,910		6,777		6,838		6,900	
NOTES: A conceptual potable reuse project (Encina Wastewater Authority Potable Reuse Project) is being explored and may provide up to 2,000 AFY of additional local water supply to the District in the future, thereby reducing the District's annual demands on the Water Authority by approximately 2,000 AFY. This project does not have any implementing agency or funding secured, so this project is not listed as a supply in this table.										

6.11 Climate Change Impacts to Supply

The District's water supply portfolio includes local surface water from Lake Hodges and imported water from the Water Authority, which is sourced from the Colorado River Aqueduct and from the Delta via the SWP, and desalinated seawater from the Water Authority. According to San Diego's 2019 IRWM Plan Update, climate change may affect the water supply in the District and the greater San Diego region. Climate change may cause increased frequency of droughts, seawater intrusion, changes in precipitation volumes and timing, altered fire and weather regimes, and potential changes in the availability of imported water supplies. Climate change may also impact the beneficial uses of water as well as water quality. In addition, uncertainties caused by climate changes complicate mitigation and emergency response planning.

Hydrologic conditions in the San Diego IRWM Region, in all of California, and in the Colorado River Basin, all of which impact the District's water supply, will likely be altered as a result of global climate change. Key changes in hydrologic conditions outlined by the IRWM Plan that could affect the supplies for the District include but are not limited to:

- ***Snowpack Change –*** California is heavily dependent on snowpack in the Sierra Nevada Mountains. Reduction in snowpack would result in decreased stored water available to the state and could adversely impact imported water available to the District and the San Diego IRWM region.
- ***Hydrologic Patterns –*** Storms and precipitation patterns have changed over the past century throughout California. Climate change could lead to further changes in precipitation patterns and result in varying water availability in the state and the region. Flood management issues, increased erosion, and water quality impacts could occur with increased frequency and intensity of storm events.
- ***Water Temperatures –*** Increased air temperatures may result in increased reservoir water temperatures, adversely affecting regional water quality and the District's imported raw water. Increased air temperatures would also lead to greater evaporation of reservoirs and lakes, higher demand in energy for cooling, and greater demand for agriculture.

6.11.1 Snowpack Change

Rising temperatures reduce snowpack in the Sierra Nevada as more precipitation falls as rain, and snowmelt occurs sooner. Snowpack in the Sierra Nevada is the primary source of supply for the SWP. Snowpack is often considered a large surface reservoir, where water is slowly released between April and July each year. Much of the water infrastructure in the state was designed to capture this slow spring runoff and deliver during drier summer

and fall months. By the end of this century, DWR projects the Sierra Nevada snowpack could experience a 48-65% loss from historical April 1 average.[1]

6.11.2 Sea-Level Rise

Rising sea levels could increase the risk of damage to water infrastructure and water recycling facilities from storms, high tide events, and erosion of levees. A potential catastrophic levee breach in the Delta could interrupt SWP supplies, potentially reducing supply deliveries to the San Diego region from Metropolitan. In addition, rising sea levels could cause saltwater intrusion in the Delta, degrading drinking water quality. More freshwater releases from upstream reservoirs would be required to repel seawater and maintain salinity levels for M&I and agricultural uses.[1]

6.11.3 Changes in Wet and Dry Periods

The effect of climate change on overall precipitation and runoff volumes is still unclear and highly uncertain. For example, several studies conclude that Colorado River flow may be reduced by climate change, but wide disparity exists on predicted volume of that change. Yield from local surface water resources could potentially be reduced if annual runoff volumes decrease due to a decline in precipitation, or if an increase occurs in evapotranspiration in reservoirs.[1]

The last two decades in California underscore strong propensity for wet and dry periods, with a string of multi-year droughts punctuated by several wet years. Scripps Institution of Oceanography downscaled global models indicate by the mid-21st century, California dry years may become drier and wet years occasionally becoming wetter. According to Scripps, these precipitation and drought extremes would exacerbate other climate problems confronting the state, both flood- and drought-related.[1] Two key climate change signals in the hydroclimate of California have been identified:

- Progressively less frequent precipitation, particularly in the fall and spring, and greater precipitation extremes. Although these signals together provide the same annual mean precipitation, the natural volatility of the San Diego region hydroclimate is exacerbated by increasing reliance on the largest storms of the year to make up annual total precipitation.
- In California, the variability of the annual water supply is dictated by the presence or absence of a few large winter storms. In most cases, these wet storms are identified as long, narrow bands of water vapor known as atmospheric rivers (ARs). ARs are the source of the heaviest rains on the West Coast. ARs are both a hazard

[1] SDCWA-Public-Review-Draft-2025-UWMP-with-Appendices.pdf

and a benefit causing most floods on the West Coast but delivers most of the rain and snow vital for water supplies in the state. Like hurricanes, ARs become more damaging the stronger they are. Scientists at Scripps study these storms to improve forecasts, assess their potential for producing rain and snow, and advise water managers who operate critical state reservoirs and infrastructure.[1]

6.11.4 Change in Frequency and Intensity of Droughts

Warming temperatures, combined with potential changes in rainfall and runoff patterns, could exacerbate the frequency and intensity of droughts. According to Scripps, tree rings and other paleoclimate evidence show the Southwest is prone to megadroughts that can last for decades.[2] Such droughts will likely increase as global temperatures warm and California precipitation becomes more variable. Under warmer temperatures, more moisture evaporates from plants and soil, leading to drier seasonal conditions even in years with historically average precipitation. Seasonal aridity could intensify, with soils drying earlier in spring and remaining dry well into fall and occasionally winter.[3] Scripps' modeling indicates the annual volume of water stored in Shasta and Oroville reservoirs, the two largest in the state, could shrink by one-third by the end of the century. This reduced storage could limit water supplies and thus lower resilience to droughts.

6.11.5 Demand Levels

Climate change could also gradually affect duration of water demands in the future. Warmer temperatures increase evapotranspiration rates and the growing season, which are likely to increase outdoor consumptive water use for landscaping. Conversely, due to probability of greater winter precipitation extremes, the San Diego region may experience fluctuating demand levels more often.

As evident in recent years, demands were significantly reduced primarily driven by a second consecutive year of above average rainfall. Another extreme weather event was observed when precipitation began unseasonably early with Tropical Storm Hillary in late-August 2024, which brought two inches of rain suppressing peak summertime demands and augmenting the Water Authority's member agencies' local surface water supplies earlier than normal.[1]

[1] SDCWA-Public-Review-Draft-2025-UWMP-with-Appendices.pdf
[2] FAQ: Climate Change in California | Scripps Institution of Oceanography: https://scripps.ucsd.edu/research/climate-change-resources/faq-climate-change-california
[3] A. Park Williams et al. ,Large contribution from anthropogenic warming to an emerging North American megadrought.Science368,314-318(2020).DOI:10.1126/science.aaz9600

As part of the water demand forecasting effort for this 2025 UWMP, long-term influence of climate change on demands in the San Diego region were evaluated. The overall potential long-term effect is a possible decrease in availability of imported water supplies from Metropolitan and local supplies, or surplus regional water supplies due to lower demands causing a significant imbalance between supply and demand. Finally, as discussed in **Chapter 9 – Demand Management Measures**, the District continues to participate in water conservation programs that have proven to reduce customers' water consumption over time.

6.12 Regulatory Conditions and Project Development

The District is an importer of water from the Sacramento-San Joaquin Delta (Delta) through its wholesale supplier, the Water Authority and the SWP. Accordingly, regulatory conditions affecting Delta operations, including implementation of the Bay-Delta Water Quality Control Plan and other Delta-related requirements, may affect the reliability and availability of imported water supplies to the region.

The Water Authority addresses reduced reliance on the Delta and related regulatory conditions in Appendix J of its draft 2025 UWMP, Reporting on Reduced Delta Reliance. This appendix describes the regional planning framework used to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance, and summarizes expected outcomes for reduced Delta reliance and increased regional self-reliance. The analysis indicates that reduced reliance on Delta supplies is being achieved through regional and local investments in water conservation, recycled water, desalination, groundwater and surface water development, storage, transfer supplies, and other supply diversification measures.

Because the District relies on the Water Authority for imported supplies and does not independently model Delta-related supply reductions, the District relies on the Water Authority's regional analysis and planning assumptions regarding Bay-Delta regulatory conditions, reduced Delta reliance, and project development. For reference, the Water Authority's draft Appendix J has been copied and is provided as Appendix H to this UWMP.

As described by the Water Authority, implementation of Bay-Delta regulatory requirements and other related projects or regulations may reduce the amount of water available for export from the Delta and may affect SWP supplies available regionally. However, the effect on the District is expected to be moderated by the Water Authority's diversified supply portfolio and ongoing regional self-reliance efforts.

6.13 Energy Intensity of Supplies

CWC 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.*

Water energy intensity (EI) is the total amount of energy expended on a per AF basis to take water from the location the District acquires it to the point of delivery. Thus, EI includes conveyance, extraction, treatment, placing water into and taking it from storage, and distribution. The District's water EI only accounts for the water management processes occurring within its operational control; therefore, energy use associated with the extraction and treatment and conveyance of wholesale water to the District's points of diversion are not included.

Because the District receives potable water from the Water Authority, and this water is already treated prior to entering the District's distribution system, energy demands for the District's potable system are limited to the energy requirements for distribution and local storage. The District's local surface water supply is treated at the Badger Plant, which is jointly owned by the District and SFID; however, since the Badger Plant is located within SFID's service area, water is treated prior to entering the District's distribution system. Energy intensity of all the water treated at the Badger Plant is included in SFID's 2025 UWMP. Treated water is conveyed from the Badger Plant to the District's distribution system through gravity pipelines and therefore no energy is required. The Badger Plant uses an average of 71,800 kwh per month in fiscal year 2025.

Moreover, the District's entire distribution system is gravity-fed with the exception of one emergency pump station that was built to distribute water to refill a reservoir in the District's highest pressure zone (520 feet). This emergency pump station has never been used for supply since it was built in 1998. However, the District operates the three pumps at this station for approximately five minutes per week to ensure they are running properly. After each run cycle, the pumped waters are returned to the system.

7. WATER SUPPLY RELIABILITY AND DROUGHT RISK ASSESSMENT

A water supplier faces a water shortage when available water supplies are less than projected demands. Although water suppliers conduct extensive long-term planning to have enough available supplies to meet customers' demands, external factors can cause unexpected and unanticipated water supply shortages such as severe drought, earthquakes, catastrophic power outages, water quality or climatic constraints, sabotage, and other legal and environmental challenges. CWC Section 10635(a) requires suppliers to include an assessment of water supply reliability in this UWMP to plan for potential water shortages during varying conditions that can cause reductions in available supply.

During the recent drought, dry conditions persisted throughout Southern California from 2012-2017 and 2021-2023 and compelled the District and other regional water suppliers to take supply augmentation and demand reduction actions to ensure adequate supply was available to meet demand. The additional restrictions related to Lake Hodges water supply prompted recent reassessment of the District's supplies during potential water shortages. This chapter describes the District's supply reliability assessment, which includes a new requirement to conduct a Drought Risk Assessment (DRA) that will enable the District to evaluate risk under a severe drought period lasting for the next five consecutive years. The assessment also provides a rational basis for future decision-making related to supply management, demand management, and project development within the District.

This Chapter contains information related to the District's water supply reliability assessment and includes the following sections:

- Constraints on Water Sources
- Water Service Reliability Assessment
- Drought Risk Assessment
- Five-Year Drought Risk Assessment
- Regional Supply Reliability
- Water Sustainability Plan

7.1 Constraints on Water Sources

CWC Section 10631

> *(b)(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 more 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.*

CWC 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.*

CWC Section 10635 (b)(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.*

CWC Section10635 (b)(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.*

The District's water supply portfolio comprises purchased water from the Water Authority (including imported water and desalinated seawater), local surface water from Lake Hodges, and recycled water purchased from the SEJPA, which are discussed in more detail in **Chapter 6 – Normal Year Water Supply Characterization**. Water quantity and quality constraints associated with the District's supply sources are described below.

7.1.1 Local Surface Water Supply Constraints

Local water supplies from Lake Hodges are especially vulnerable to drought conditions and regulatory constraints. Based upon its agreement with the City of San Diego, the District and SFID currently share 50% of local raw water captured in Lake Hodges. With the current temporary reduction in Lake Hodges, under drought conditions, if the local surface water stored in Lake Hodges, San Dieguito Reservoir, and other District storage facilities is not sufficient to meet District needs, the District has the ability to purchase additional imported raw or treated water from the Water Authority. Given that local raw water is largely rainwater runoff, the reliability of water from Lake Hodges will also vary based on regional precipitation amounts.

Local surface water has historically presented treatability issues with total organic compounds, coliform bacteria, iron, manganese, total dissolved solids, dissolved oxygen levels, Cryptosporidium sp. and Giardia sp., as well as algae. Water quality in Lake Hodges can vary significantly and considerable changes in concentrations of key parameters have been observed over short periods of time, particularly during or after storm events. During winter months, water quality challenges include high turbidity and organics loading,

whereas algae blooms, iron, manganese, and sulfides typically create treatment challenges during the spring and summer. Although raw water quality at Lake Hodges is variable, all local surface water is treated at the Badger Plant and conforms to applicable drinking water standards.

7.1.2 Recycled Water Supply Constraints

Through a contract with the SEJPA, the District's local supply portfolio also comprises recycled water for non-potable irrigation demands. Unlike the District's Lake Hodges surface water supply, recycled water is considered "drought-proof" because it is typically not vulnerable to drought conditions. Recycled water purchased by the District is produced at the SEWRF through tertiary wastewater treatment processes. Wastewater discharges are generally not impacted by changes in climate or precipitation and are therefore considered drought-proof. SEJPA's tertiary treatment capacity is 3.0 MGD (3,362 AFY), while agencies purchasing recycled water from SEJPA project use less than 2,000 AFY combined. As such, SEJPA has sufficient tertiary treatment capacity to increase recycled water deliveries to the District should recycled water demands increase during drought conditions.

7.1.3 Purchased and Imported Water Supply Constraints

The District purchases water from the Water Authority to augment its local supplies. The Water Authority purchases water from MWD, who imports water from the CRA and the Delta through the SWP.

MWD Supplies

MWD has completed a reliability assessment that identifies the potential risks and uncertainties that could affect reliability of their supplies. Because the District receives imported water from MWD through its purchases from the Water Authority, potential risks to MWD's supplies (SWP and CRA) are also potential risks to the District's imported water supplies. The Water Authority Draft UWMP shows a potential reduction of 28 thousand acre-feet during drought conditions from MWD. A summary of the potential risks identified by MWD is provided below.

- **Risks Affecting Supplies**: Hydrologic conditions and environmental regulations can significantly impact MWD's imported water supplies. The SWP and CRA rely heavily on precipitation to replenish available supply storage. Over the past two decades, MWD has significantly increased its storage capabilities to include both dry-year and emergency storage. MWD developed this additional storage to plan for the risks that hydrologic variability, potential climate change, and

environmental regulations pose to its supplies. The MWD also faces challenges with promoting more resilient, drought-proof supplies, including public perception of recycled water use and local community and environmental opposition to seawater desalination.

- **Risks Affecting Operations and Water Quality**: MWD's net energy use and costs are dominated by the pumping required to import water from the CRA and SWP systems. Since MWD does not have direct control over the SWP, it has focused its energy strategy on reducing energy use, costs, and greenhouse gas (GHG) emissions associated with the CRA operations. Reducing energy needs for the CRA operations and diversifying MWD's supply portfolio will lead to increased supply reliability. Water quality regulations and issues such as algae toxins, PFAS, and other constituents of emerging concern pose risks to the CRA and SWP supplies. High salinity is also a significant water quality issue associated with the CRA supplies. MWD relies on blending its CRA supplies with SWP water to mitigate for the higher-salinity CRA water. During recent periods of drought, MWD's SWP allocation has been substantially reduced, including to historical lows of 5% in 2014, 20% in 2015, 5% in 2021 and 2022 which affected blending operations.

- **Risks Affecting Demands**: MWD recognizes that there are several potential risks associated with projecting demands. Although demand projections are informed by historical and current data, there are still various factors that could contribute to unanticipated fluctuations in demands such as changes in population and economic growth, uncertainty in location of growth, uncertainty regarding housing stock and density, and changes in outdoor water use patterns.

- **Distribution System Water Losses**: Although the AWWA Water Audit methodology provides a tool to quantify real and apparent water system losses in a supplier's distribution system, there is still uncertainty because these water losses are estimated rather than measured. MWD completes a voluntary distribution system water loss assessment to estimate water losses associated with the treated distribution system and reservoir evaporation.

- **Climate Change**: Potential changes associated with climate change pose risks to supply reliability by adding uncertainty to the challenges of planning. Although the exact timing, magnitude, and regional impacts of such uncertainties remain unknown, researchers have identified several areas of concern for California water planners, including reduction in Sierra Nevada snowpack, increased intensity and frequency of extreme weather, prolonged droughts, water quality issues associated with increased occurrences of wildfires, changes in rainfall runoff patterns and

amounts, and rising sea levels. Increasing supply reliability will mitigate the potential impacts of climate change.

Water Authority Supplies

The Water Authority is working to diversify its supplies and decrease its dependence on less reliable, imported water supplies from MWD over the next 25 years. The Water Authority's 2025 UWMP reports that forecasted imported water supply capabilities and stored water would be sufficient to meet expected demands under the single driest year and all five years of the multiple dry year hydrological scenarios. Investments that have been made by the Water Authority and its member agencies, such as providing additional carryover storage, are anticipated to help achieve reliability in dry years and multiple dry years. The Water Authority drought risk assessment shows a 116% increase in demand during the 5th consecutive dry year and an anticipated surplus of 264 thousand acre-feet after 5 years. In the unanticipated event that shortages occur during multiple dry year periods, additional regional demand management measures consistent with the Water Authority's Water Shortage and Drought Response Plan (refer to Chapter 8 – Water Shortage Contingency Planning), will be taken to overcome the supply deficit.

The Water Authority's Draft 2025 UWMP provides an overview of water quality concerns related to imported water supplies from MWD, which are briefly discussed in the preceding section. Colorado River water has a higher TDS than State Water Project water. For SWP supplies, key water quality issues are disinfection byproduct precursors, in particular total organic carbon, bromide, and low alkalinity. While municipal agencies that utilize the imported water supplies treat all water to meet both state and federal drinking water standards before the water is delivered to customers, the Water Authority notes that poor quality source water will be increasingly expensive and difficult to treat to meet the established regulatory standards.

The Water Authority's local supplies, such as seawater desalination, are not anticipated to be impacted by water quality issues provided that treatment has been designed such that water quality of desalinated water is low in TDS and in other constituents that otherwise pose concerns to regional water quality.

Reduced Reliance on the Delta

The State is seeking to reduce overall dependence on the Bay-Delta, and requires urban water suppliers that anticipate 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 Delta are required

to demonstrate reduced reliance on the Delta in their UWMPs. Because the District relies on the Water Authority for imported supplies and does not independently model Delta-related supply reductions, the District relies on the Water Authority's regional analysis and planning assumptions regarding Bay-Delta regulatory conditions, reduced Delta reliance, and project development. For reference, the Water Authority's draft Appendix J has been copied and is provided as **Appendix H** to this UWMP. Consistent with Appendix C of the Department of Water Resources' 2025 UWMP Guidebook, the District relies on the Water Authority's regional analysis to evaluate reduced reliance on Delta supplies. Due to differences in accounting methodologies between wholesale and retail water suppliers, including the treatment of water use efficiency as a supply, the District does not independently quantify Delta reliance reductions. Instead, the District's contributions to reduced Delta reliance are reflected through its participation in regional supply diversification and conservation programs, as incorporated into the Water Authority's analysis.

7.2 Water Service Reliability Assessment

CWC 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.*

CWC Sections 10631(b)(1) and 10631(f) requires suppliers to assess supply reliability not only during normal years but also during single dry and multiple dry years to plan for potential droughts and/or other catastrophic supply interruptions. A normal, or average, year is representative of the water supplies that a supplier anticipates will be available during normal conditions and could be a single year or an averaged range of years. Single dry and multiple dry year conditions are usually based on historical records of annual runoff from a particular watershed. To evaluate supply reliability for single year dry conditions, suppliers must assess supply reliability for the year that represents the lowest water supply available to the supplier. To evaluate supply reliability for multiple year dry

conditions, suppliers assess supply reliability for a five consecutive year period that is representative of the driest five-year historical sequence for the supplier.

The District selected years for its normal water years, single dry and multiple dry year periods based on historical droughts from the District and the Water Authority. The average year period was selected based on hydrologic modeling performed by the Water Authority that modeled supplies and demands from 1986 – 2005. The District selected year 2015 as its single dry year period because it is representative of the lowest regional water supply availability during the recent severe drought. The District selected years 2011 – 2015 as its multiple dry year period because this was the period where average runoff in the watersheds that affect the regions water supplies was at its lowest. The multiple dry year analysis assumes that recycled water demands vary consistently with potable demands during dry years. In dry years, demands are expected to be between 107% - 109% of normal. SEJPA has sufficient capacity to accommodate these increases in recycled water demands. **Table 7-1** presents the District's basis of water year data, including the base years selected for each year type and the average percentage of water supply that would be available. Once restored, Lake Hodges is assumed to provide a consistent annual supply based on an estimated operational yield of approximately 2,430 AFY. This yield is assumed to be available under all hydrologic conditions due to the managed nature of the reservoir and its integration within the regional supply system. Accordingly, supply from Lake Hodges is held constant across normal, single dry year, and multiple dry year scenarios. Prior to restoration, Lake Hodges is not considered an available supply and is shown as zero.

The District provided the Water Authority with its water demand projections, including anticipated imported water needs from 2030 to 2050 for normal, single dry, and multiple dry years. These projections were calculated using trends in historical data, planned new construction, planned infill projects, and the current reduced supply availability within the District's local sources. While the projections included in this UWMP differ from those projected by the Water Authority, by 2050, the District expects imported demand to be approximately 585 AF higher than the Water Authority's estimates, which accounts for about 0.2% of the Water Authority's total demand needs in a normal supply year.

TABLE 7-1: BASIS OF WATER YEAR DATA

DWR Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)		
Year Type	Base Year	% of Average Supply
Average Year	1986-2018	100%
Single-Dry Year	2015	107%
Consecutive Dry Years 1st Year	2011	107%
Consecutive Dry Years 2nd Year	2012	107%
Consecutive Dry Years 3rd Year	2013	108%
Consecutive Dry Years 4th Year	2014	108%
Consecutive Dry Years 5th Year	2015	109%

7.3 Drought Risk Assessment

CWC 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.*

CWC Section 10635(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 Pasts 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.

7.3.1 Projected Normal Year Supply and Demand

Table 7-2 compares current and projected water supply and demand under normal year conditions and indicates that, in average precipitation years, the District has sufficient water to meet its customers' needs through 2050. This projection is based on continued commitment to conservation measures, availability of local surface water and recycled water supplies, and commitment by the Water Authority to meet its member agencies' demands.

TABLE 7-2: NORMAL YEAR SUPPLY VS. DEMAND

DWR Table 7-2 Retail: Normal Year Supply and Use Comparison					
	2030	2035	2040	2045	2050
Purchased Water (Water Authority)	6,403	6,210	3,647	3,708	3,770
Surface Water (Lake Hodges)	0	0	2,430	2,430	2,430
Recycled Water	700	700	700	700	700
Supply Totals	**7,103**	**6,910**	**6,777**	**6,838**	**6,900**
Potable Water Demand	6,403	6,210	6,077	6,138	6,200
Recycled Water Demand	700	700	700	700	700
Use Totals	**7,103**	**6,910**	**6,777**	**6,838**	**6,900**
Potable Water Difference	-	-	-	-	-
Recycled Water Difference	-	-	-	-	-
Difference	-	-	-	-	-

7.3.2 Projected Single Dry Year Supply and Demand

Table 7-3 compares the District's projected water supply and demand during a single dry year and indicates that the District has sufficient water to meet its customers' needs through 2050. Demands in a single dry year are expected to increase by approximately 7% from normal year demands. The analysis assumes the overall increase in demand applies equally to both potable and non-potable demand. The Water Authority's supply reliability analysis, documented in its 2025 UWMP, shows that there are sufficient supplies available to the Water Authority to meet all member agency demands in the single dry year scenario when accounting for both increases in regional demands and dry year impacts on local supply availability for member agencies. The analysis therefore assumes that there would be no shortages in water available for purchase from the Water Authority during any single dry year through 2050 due to the Water Authority's carryover supplies (supplies in storage). In 2030 to 2035, when the District assumes zero local supplies,

additional water will be purchased from the Water Authority. When local water supplies become available, in the estimated amount of 2,430 AF, the District anticipates to decrease that demand from the Water Authority. The Water Authority's 2025 UWMP states that additional water supplies would be available to the Water Authority member agencies during a single dry year, the District could purchase additional supplies from the Water Authority to supplement the reduction in local surface water supply. Given that recycled water is a drought-proof supply and SEJPA's SEWRF has sufficient treatment capacity to increase recycled water deliveries by 7% above normal year use, sufficient recycled water would be available to meet single year dry demands through 2050.

This analysis assumes that the District's customers would not be required to increase conservation in a single dry-year due to additional supply availability from the Water Authority, and that passive and active conservation would continue at normal levels such that demands would be consistent with normal water year levels.

TABLE 7-3: SINGLE DRY YEAR SUPPLY VS. DEMAND

DWR Table 7-3 Retail: Single Dry Year Supply and Use Comparison					
	2030	2035	2040	2045	2050
Purchased Water (Water Authority)	6,928	6,740	4,182	4,249	4,317
Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
Recycled Water	701	708	715	722	730
Supply Totals	**7,629**	**7,448**	**7,327**	**7,402**	**7,476**
Potable Water Demand	6,928	6,740	6,612	6,679	6,747
Recycled Water Demand	701	708	715	722	730
Use Totals	**7,629**	**7,448**	**7,327**	**7,402**	**7,476**
Potable Water Difference	-	-	-	-	-
Recycled Water Difference	-	-	-	-	-
Difference	-	-	-	-	-

7.3.3 Projected Multiple Dry Year Supply and Demand

Table 7-4 compares the District's projected water supply and demand during multiple dry years and indicates that the District has sufficient water to meet its customers' needs through 2050. Under the multiple dry year analysis, demands are anticipated to range from approximately 7% above normal in the first year to approximately 9% above normal in the fifth year. The multiple dry year analysis also assumes overall increases in demand apply equally to both potable and non-potable demand for the first year, then additional

increases in subsequent dry years. The analysis used an average demand increase for each year of the multiple dry year scenario due to uncertainty in projecting multiple dry year demands. The Water Authority's supply reliability analysis, documented in its 2025 UWMP, shows that there are sufficient supplies available to the Water Authority to meet all member agency demands in all years of the multiple dry year scenario when accounting for both increases in regional demands and dry year impacts on local supply availability for member agencies. The analysis therefore assumes that there would be enough regional storage capacity and additional supplies to meet the District's demands during all years of a five-year drought period through 2050. Given that recycled water is a drought-proof supply and SEJPA's SEWRF has sufficient treatment capacity to increase recycled water deliveries by 9% above normal year use, sufficient recycled water would be available to meet demands during a multiple dry year period through 2045. Recycled water use may increase in multiple dry years due to increases in irrigation.

The Water Authority's Draft 2025 UWMP indicates that a supply shortage is not expected at any point during the multiple dry year period and there is surplus water during all multi dry year scenarios. Because the Water Authority's supply reliability analysis incorporates member agency supplies and total member agency demands (not just total demands on the Water Authority), any year the Water Authority's analysis finds 100% reliability, the District expects to be able to purchase as much water as needed to meet demands not met by local supplies.

TABLE 7-4: MULTIPLE DRY YEAR SUPPLY VS. DEMAND

DWR Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2030	2035	2040	2045	2050
Year 1	Purchased Water (Water Authority)	6,928	7,083	4,474	4,360	4,434
	Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
	Recycled Water	702	709	716	723	731
	Supply Totals	**7,630**	**7,792**	**7,620**	**7,513**	**7,595**
	Potable Water Demand	6,928	7,083	6,904	6,790	6,864
	Recycled Water Demand	702	709	716	723	731
	Demand Totals	**7,630**	**7,792**	**7,620**	**7,513**	**7,595**
	Potable Water Difference	-	-	-	-	-
	Recycled Water Difference	-	-	-	-	-
	Difference	-	-	-	-	-
Year 2	Purchased Water (Water Authority)	7,004	6,784	4,279	4,275	4,489
	Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
	Recycled Water	703	710	717	724	732
	Supply Totals	**7,707**	**7,494**	**7,426**	**7,429**	**7,650**
	Potable Water Demand	7,004	6,784	6,709	6,705	6,919
	Recycled Water Demand	703	710	717	724	732
	Demand Totals	**7,707**	**7,494**	**7,426**	**7,429**	**7,650**
	Potable Water Difference	-	-	-	-	-
	Recycled Water Difference	-	-	-	-	-
	Difference	-	-	-	-	-
Year 3	Purchased Water (Water Authority)	7,005	6,826	4,281	4,353	4,305
	Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
	Recycled Water	704	711	718	725	732
	Supply Totals	**7,709**	**7,537**	**7,429**	**7,508**	**7,467**
	Potable Water Demand	7,005	6,826	6,711	6,783	6,735
	Recycled Water Demand	704	711	718	725	732
	Demand Totals	**7,709**	**7,537**	**7,429**	**7,508**	**7,467**
	Potable Water Difference	-	-	-	-	-
	Recycled Water Difference	-	-	-	-	-
	Difference	-	-	-	-	-
Year 4	Purchased Water (Water Authority)	7,007	6,827	4,282	4,356	4,351
	Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
	Recycled Water	705	712	719	726	733
	Supply Totals	**7,712**	**7,539**	**7,431**	**7,512**	**7,514**

DWR Table 7-4 Retail: Multiple Dry Years Supply and Demand Comparison						
		2030	2035	2040	2045	2050
	Potable Water Demand	7,007	6,827	6,712	6,786	6,781
	Recycled Water Demand	705	712	719	726	733
	Demand Totals	**7,712**	**7,539**	**7,431**	**7,512**	**7,514**
	Potable Water Difference	-	-	-	-	-
	Recycled Water Difference	-	-	-	-	-
	Difference	-	-	-	-	-
Year 5	Purchased Water (Water Authority)	7,083	6,904	4,360	4,434	4,385
	Surface Water (Lake Hodges)	-	-	2,430	2,430	2,430
	Recycled Water	706	713	720	727	734
	Supply Totals	**7,789**	**7,617**	**7,510**	**7,591**	**7,549**
	Potable Water Demand	7,083	6,904	6,790	6,864	6,815
	Recycled Water Demand	706	713	720	727	734
	Demand Totals	**7,789**	**7,617**	**7,510**	**7,591**	**7,549**
	Potable Water Difference	-	-	-	-	-
	Recycled Water Difference	-	-	-	-	-
	Difference	-	-	-	-	-

7.4 Five-Year Drought Risk Assessment

CWC Section 10635(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.

The District completed a DRA to determine the reliability of water service under a severe drought period lasting for the next five consecutive years. The results of the DRA are considered in the development of demand management measures (refer to Chapter 9 – Demand Management Measures) and water supply projects (refer to Chapter 6 – Normal Year Water Supply Characterization)The DRA provides an opportunity to evaluate the functionality of the District's Water Shortage Contingency Plan (WSCP), discussed in Chapter 8 – Water Shortage Contingency Planning. Results of this evaluation can be used to help identify undesired risks and allow for proactive steps to be taken prior to the next actual long-term drought. The DRA can be modified or updated on an interim cycle, as needed, to allow for the incorporation of new information as it becomes available or in the event of unforeseen circumstances.

7.4.1 Data and Methodology

Per UWMP requirements, the DRA is based on the five driest consecutive years on record. To align with the Water Authority's DRA, the historical period used in this analysis is the period from 2014 to 2018. This represents the five-year period determined by the Water Authority to have the lowest local water supply production from surface water and groundwater, the Water Authority's two local water supplies that are most susceptible to variation due to weather conditions. As discussed in **Section 7.1**, the District's supply portfolio includes water purchased from the Water Authority, local surface water captured at Lake Hodges, and recycled water purchased from SEJPA. Recycled water purchases are considered to be drought-proof supplies and therefore are not expected to be significantly impacted by weather conditions.

During periods where non-potable demands exceed non-potable supplies, the District supplements with potable water by increasing its purchases from the Water Authority accordingly. Therefore, because the District purchases water from the Water Authority to meet demands that cannot be met with local supplies, and the Water Authority's DRA accounts for both regional demands and availability of local supplies (including Lake Hodges and recycled water), the District's DRA uses the Water Authority's DRA as the basis for availability of purchased supplies. For years where the Water Authority projects sufficient supplies to meet demands, the District expects to be able to purchase enough water to meet demands. Data used to calculate the District's supply capabilities under the scenario of five consecutive dry years is provided in **Table 7-5.**

Projected demands were calculated using multipliers provided by the Water Authority in their Draft 2025 UWMP (shown in **Table 7-5**). These multipliers are based on a weather index that was developed to assess the impact of dry/hot weather conditions on demands. Per the Water Authority's Draft 2025 UWMP, these demand multipliers are applied to 2025 demands.

TABLE 7-5: PROJECTED POTABLE WATER DEMANDS – NORMAL VS. FIVE-YEAR DROUGHT CONDITIONS

Projected Demands (2025)					
	2026	2027	2028	2029	2030
Demand Projection Multiplier (Change from 2025)[1]	109%	109%	111%	114%	116%
Projected Five-Year Potable Drought Demands (AFY)	7,743	8,440	9,368	10,679	12,388
NOTES: [1]Based on a weather index developed to assess the impact of dry/hot weather on water use.					

7.4.2 Determination of Reliability

The Water Authority anticipates a surplus of water supplies in all five years of an extended drought period and would have enough supply to meet the District's increased demands shown in **Table 7-5**. The analysis presented in

DWR Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)					
Year	2026	2027	2028	2029	2030
Gross Potable Water Use	7,743	8,440	9,368	10,679	12,388
Gross Recycled Water Use	708	715	722	729	737
Total Water Use	8,451	9,155	10,090	11,409	13,125
Total Supplies	8,451	9,155	10,090	11,409	13,125
Surplus/Shortfall w/o WSCP Action	0	0	0	0	0
WSCP – Supply Augmentation Benefit	0	0	0	0	0

DWR Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)					
Year	2026	2027	2028	2029	2030
WSCP – Use Reduction Savings Benefit	0	0	0	0	0
Revised Surplus/Shortfall	0	0	0	0	0
Resulting % Use Reduction from WSCP Action	0	0	0	0	0

Table 7-6, the District would be able to meet its water demands in all five years of the extended drought period; and therefore, implementation of shortage response actions, as discussed in the District's WSCP, would not be required (refer to Chapter 8 – Water Shortage Contingency Planning).

TABLE 7-6: FIVE-YEAR DROUGHT RISK ASSESSMENT (POTABLE WATER)

DWR Table 7-5: Five-Year Drought Risk Assessment Tables to address Water Code Section 10635(b)					
Year	2026	2027	2028	2029	2030
Gross Potable Water Use	7,743	8,440	9,368	10,679	12,388
Gross Recycled Water Use	708	715	722	729	737
Total Water Use	8,451	9,155	10,090	11,409	13,125
Total Supplies	8,451	9,155	10,090	11,409	13,125
Surplus/Shortfall w/o WSCP Action	0	0	0	0	0
WSCP – Supply Augmentation Benefit	0	0	0	0	0
WSCP – Use Reduction Savings Benefit	0	0	0	0	0
Revised Surplus/Shortfall	0	0	0	0	0
Resulting % Use Reduction from WSCP Action	0	0	0	0	0

7.5 Regional Supply Reliability

CWC Section 10620

> *(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.*

The District is increasing efforts to maximize the use of local water resources in order to reduce its overall dependence on imported supplies and increase its supply reliability. The

District has taken steps towards achieving this goal by offering rebate and incentive programs to reduce indoor and outdoor water use (refer to **Chapter 9 – Demand Management Measures**), supporting development of local drought-proof supplies (refer to **Chapter 6 – Normal Year Water Supply Characterization**), and implementing voluntary and mandatory water use restrictions as needed to reduce demands during droughts conditions (refer to **Chapter 8 – Water Shortage Contingency Planning**).

The Water Authority works closely with its 24 member agencies to promote development of local supply resources and water conservation efforts. Several rebate and incentive programs offered by the District, many in conjunction with the Water Authority and MWD, have contributed to significant reductions in overall demands as evidenced by the District's achievement of its SB X7-7 2020 Target (refer to **Chapter 5 – SB X7-7 Baselines, 2020 Targets, and 2025 Reporting**). The District is also a proponent of a future water project that would increase its local water resources by supplying approximately 2,000 AF of potable reuse water to SDWD to meet demand, as discussed in Section 6.8 of this UWMP. During dry years, when available water supplies are reduced, the District manages its overall water supply and demand balance through implementation of the voluntary and mandatory water use restrictions defined in its Water Supply Shortage Response Program. Together, these water supply diversification and demand management tools and measures will maximize the District's local resources and minimize its need to purchase imported water from the Water Authority.

8. WATER SHORTAGE CONTINGENCY PLAN

CWC Section 10632

> *(a) Every urban water supplier shall prepare and adopt a water shortage contingency plan as part of its urban water management plan…*
>
> *(c) The urban water supplier shall make available the water shortage contingency plan prepared pursuant to this article to its customers and any city of county with which it provides water supplies no later than 30 days after adoption of the water shortage contingency plan.*

8.1 Water Supply Reliability Analysis

The District's water supply reliability analysis for the 2025 Urban Water Management Plan was completed utilizing the San Diego County Water Authority's regional reliability assessment methodologies, reflecting the District's reliance on imported supplies to supplement local water sources. The Water Authority's 2025 UWMP evaluates projected demands and available supplies under normal, single dry year, and multiple dry year hydrologic conditions and accounts for the region's diversified water supply portfolio.

Consistent with the regional analysis, demands are expected to increase during dry conditions while some local supplies may be constrained. The District assumes that these increased demands would be met through additional purchases from the Water Authority. Based on the Water Authority's assessment, sufficient regional supplies are projected to be available to meet demands under all evaluated scenarios, and the District anticipates maintaining 100 percent water supply reliability throughout the planning horizon. The District's drought risk analysis and response actions are addressed in its Water Shortage Contingency Plan and is located here for reference. (WSCP, available at https://ecode360.com/44490026 and in Appendix M).

8.2 Summary of Plan

The UWMP Act, enacted in 1983, requires water suppliers to conduct shortage contingency planning analyses that outline specific actions a supplier will take in response to short-term water supply shortages caused by droughts and/or catastrophic supply interruptions.

The District's WSCP is incorporated in the District's Administrative Code as Article 29 (Water Supply Shortage Response Program) upon adoption on May 19, 2021. The WSCP (available at https://ecode360.com/44490026) establishes regulations on water management by the District and progressive restrictions on water use to be implemented for responding to water supply limitations resulting from declared water shortages or

declared water shortage emergencies. The 2021 WSCP was evaluated in during the 2025 planning process and was readopted after a public hearing on May 20, 2026 with no updates.

The District updated its Water Supply Shortage Response Program in May 2021 to comply with new 2018 legislation that was adopted in response to the recent severe drought. Pursuant to the 2018 legislation, water suppliers must address several new requirements with prescriptive elements in their water shortage contingency plans, including, but not limited to:

- Describe key attributes of and procedures for conducting an annual water supply reliability assessment;
- Update to six standard water shortage response levels (progressive ranges of 10%, 20%, 30%, 40%, 50%, and greater than 50% shortage);
- Quantify estimated water savings associated with each shortage response action;
- Describe communication protocols and public outreach measures;
- Identify monitoring and reporting procedures to track compliance; and
- Discuss methods to reevaluate and improve the water shortage contingency plan.

This WSCP contains a detailed discussion of the water shortage contingency planning undertaken by the District to prepare for, and implement during, a drought or another catastrophic interruption of water supplies, such as seismic events. The WSCP also describes the District's annual water supply reliability assessment procedures and addresses the District's mandatory prohibitions and penalties associated with excess water use.

8.2.1 Annual Assessment

CWC 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*
>
> *(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.

Consistent with the requirements of CWC Section 10632.1, the District will submit the Annual Water Supply and Demand Assessment (Annual Assessment) to DWR on or before July 1 of each year. The Annual Assessment will be used to evaluate short-term water supply reliability for the upcoming fiscal year for both normal year and single dry-year conditions. If no shortage is expected, the General Manager has the authority to submit the Annual Assessment. If the Annual Assessment identifies potential supply shortages, the Board of Directors has the authority to trigger the appropriate shortage response to offset the shortage. Additional details on the Annual Assessment content and process is provided in the WSCP (available at https://ecode360.com/44490026), and the timeline and process is presented here in **Table 8-1.**

8.2.2 Data and Methodologies

All water supplied by the District is metered at the customer level, and water production and delivery data are continuously monitored through the District's billing and operational systems. Water use data are evaluated on a regular basis, including monthly and annual comparisons of actual consumption relative to baseline and projected demand.

The District tracks water use reductions by analyzing changes in total system demand, sector-specific consumption patterns where available, and customer-level usage data. These data are compared against expected demand levels under each shortage stage to assess whether conservation targets are being achieved.

Triggers for implementing shortage response actions are based on notifications from the Water Authority, results of the District's Annual Water Supply and Demand Assessment, and observed trends in customer water use. If monitoring indicates that demand is

exceeding available or projected supplies, the District evaluates the need for additional conservation measures or progression to a higher shortage stage.

The Board of Directors is notified of significant changes in water supply or demand conditions and is responsible for declaring or modifying shortage stages in accordance with the WSCP. Corrective actions may include enhanced public outreach, increased enforcement of water use restrictions, and implementation of additional demand management measures. These methods ensure that water use reductions are tracked, verified, and adjusted as necessary to maintain alignment with available supplies.

TABLE 8-1: ANNUAL ASSESSMENT PROCESS AND TIMELINE

Time Frame	Step	Action
March - April	1(a)	District estimates available local supplies.
	1(b)	District coordinates with Water Authority to gather necessary information for the Water 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)	Through coordination with the Water Authority, the 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 the water supply reliability.
June	3(a)	If a water shortage is anticipated, the District Board of Directors (Encinitas City Council) will review and approve Annual Assessment determination and adopt any recommended actions.
	3(b)	District submits the report. Annual Assessment report to be submitted to the state by July 1.
NOTES: The process outlined above is provided as a guideline and may be modified based on conditions present during the evaluation period.		

8.2.3 Stages of Action

Table 8-2 and **Table 8-3** presents the District's six stages of actions (Levels 1 – 6), which are a sequential, regulatory program of increasingly stringent water use restrictions. The District follows the standard shortage levels. When the District declares that a particular shortage level is in effect, District customers must comply with all regulations contained in the declared stage or face a potential penalty. Details of the stages and specifics on what is prohibited under each stage are provided in the WSCP. **Table 8-3** presents the voluntary or mandatory water use restrictions and prohibitions that the District will implement for each stage, along with the anticipated savings associated with each action.

TABLE 8-2: CROSS REFERENCE FOR STANDARD VS. SUPPLIER SHORTAGE LEVELS

DWR Table 8.1: Cross-reference for Standard vs. Supplier Shortage Levels	
☑	**Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.**
Shortage Level	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%

TABLE 8-3: WATER SHORTAGE CONTINGENCY PLAN STAGES

Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Water Shortage Condition
1	Up to 10%	Includes voluntary water shortage actions to achieve demand reductions, such as water before 10 a.m. and after 6 p.m. for residential, commercial, and nursery/commercial growers.
2	Up to 20%	Mandates the voluntary actions included under Level 1 and includes additional measures focused on reducing outdoor water use such as limiting landscape irrigation for residential and commercial properties to 3 assigned days per week and imposing time limits for lawn watering with sprinklers. Irrigation restrictions do not apply to drip or micro irrigation.
3	Up to 30%	Includes mandatory Level 1 and 2 actions and additional actions focused on reducing outdoor water use such as stop operating ornamental fountains unless recycled water is used and further limiting the number of assigned days per week for residential and commercial landscape irrigation to 2 days (one day per week November through May). Irrigation restrictions do not apply to drip or micro irrigation. The District will also suspend new potable water services and new temporary and permanent meters unless the District provides a program to offset new water demands equal to the new use. The District may also establish a water allocation policy for properties served and suspend considerations of annexations to its service area.
4	Up to 40%	Includes mandatory Level 1, 2, and 3 actions and additional water shortage actions such as preventing filling/refilling of ornamental lakes or ponds (except to sustain aquatic life).
5	Up to 50%	Includes mandatory Level 1, 2, 3, and 4 actions and additional actions focused on reducing outdoor water use such as prohibiting all landscape irrigation (with exceptions for commercial growers, nurseries, and other listed uses).

Water Shortage Contingency Plan Levels		
Shortage Level	Percent Shortage Range	Water Shortage Condition
6	>50%	Includes mandatory Level 1, 2, 3, 4, and 5 actions and additional actions focused on reducing outdoor water use such as expanding prohibitions on all landscape irrigation by removing several exclusions permitted under Level 5.

TABLE 8-4: SHORTAGE RESPONSE ACTIONS BY STAGE

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
1	Other - Prohibit use of potable water for washing hard surfaces	1%		No
1	Landscape - Restrict or prohibit runoff from landscape irrigation	0.1%		No
1	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%	Wash vehicles with hand-held hose / shut-off nozzle and bucket or at a commercial site with recirculating water	No
1	Landscape - Limit landscape irrigation to specific times	3%	Irrigate residential and commercial landscape before 10 a.m. and after 6 p.m. only. Nursery and commercial growers irrigate before 10 a.m. and after 6 p.m. only.	No
1	Other	1%	Vehicles must be washed using a bucket, hand-held hose with positive shut-off nozzle, or at a commercial site that recirculated water.	No
1	CII - Restaurants may only serve water upon request	0.1%		No

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
1	CII - Lodging establishment must offer opt out of linen service	0.1%		No
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Repair all leaks within 5 days of detection or notification by the District	No
1	Other - Prohibit use of potable water for construction and dust control	< 0.1%	When recycled/non-potable water is available	No
1	Other	Variable	Comply with any mandatory regulations established by any State agency governing the use of water	No
1	Water Features - Restrict water use for decorative water features, such as fountains	1%	Use re-circulated water or recycled water to operate ornamental fountains.	No
1	Expand public information campaign	1%		No
1	Implement or modify drought rate structure or surcharge	2%	May implement drought rate structure	No
2	Other - Prohibit use of potable water for washing hard surfaces	1%		Yes
2	Landscape - Restrict or prohibit runoff from landscape irrigation	0.1%		Yes
2	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%	Wash vehicles with hand-held hose / shut-off nozzle and bucket or at a commercial site with recirculating water	Yes

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
2	Landscape - Limit landscape irrigation to specific times	3%	Irrigate residential and commercial landscape before 10 a.m. and after 6 p.m. only. Nursery and commercial growers irrigate before 10 a.m. and after 6 p.m. only.	Yes
2	Other	1%	Vehicles must be washed using a bucket, hand-held hose with positive shut-off nozzle, or at a commercial site that recirculated water.	Yes
2	CII - Restaurants may only serve water upon request	0.1%		Yes
2	CII - Lodging establishment must offer opt out of linen service	0.1%		Yes
2	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	1%	Repair all leaks within 72 hours of detection or notification by the District	Yes
2	Other - Prohibit use of potable water for construction and dust control	< 0.1%	When recycled/non-potable water is available	Yes
2	Other	Variable	Comply with any mandatory regulations established by any State agency governing the use of water	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	1%	Stop operation unless re-circulated or recycled water is used.	Yes
2	Expand public information campaign	5%		Yes
2	Implement or modify drought rate structure or surcharge	2%	May implement drought rate structure	Yes

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
2	Landscape - Limit landscape irrigation to specific days	8%	No more than 3 assigned days per week	Yes
2	Landscape - Other landscape restriction or prohibition	3%	Limit watering using sprinklers to no more than 10 minutes per watering station per assigned day.	Yes
3	Landscape - Limit landscape irrigation to specific days	18%	No more than 2 assigned days per week (no more than once per week November to May)	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	2%	Repair all leaks within 48 hours of detection or notification by the District.	Yes
3	Other	Variable	Suspend considerations of annexations to the service area.	Yes
3	Other	Variable	May establish a water allocation policy	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	1%	Stop operation unless recycled water is used.	Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	1%	Stop washing vehicles except at commercial carwashes that re-circulate water, or by high pressure/low volume wash systems	Yes
4	Water Features - Restrict water use for decorative water features, such as fountains	1%	Stop filling or refilling ornamental lakes or ponds, except to the extent needed to sustain aquatic life.	Yes
4	Moratorium or Net Zero Demand Increase on New Connections	Variable	Suspend new potable water services and new temporary and permanent meters unless the District provides a program to offset new potable water demands.	Yes

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	4%	Repair all leaks within 24 hours of detection or notification by the District	Yes
5	Landscape - Prohibit all landscape irrigation	26%	With the exception of crops and landscape products of commercial growers and nurseries and other noted exceptions (trees and shrubs watered by bucket / hand-held hose / positive shut-off nozzle / low-volume non-spray irrigation, fire protection, erosion control, rare or essential plant materials, public parks / day care centers / school grounds / cemeteries / golf course greens not exceeding (2) days per week, livestock water, public works projects, and actively irrigated environmental mitigation projects).	Yes
6	Landscape - Prohibit all landscape irrigation	30%	With the exception of crops and landscape products of commercial growers and nurseries and other noted exceptions (fire protection, erosion control, rare or essential plant materials, livestock water, public works projects, and actively irrigated environmental mitigation projects	Yes
6	Moratorium or Net Zero Demand Increase on New Connections	Variable	Suspend new potable water services and new temporary and permanent meters.	Yes

DWR Table 8-3: Demand Reduction Actions				
Shortage Level	Demand Reduction Actions	Shortage Gap Reduction	Additional Explanation or Reference *(optional)*	Penalty, Charge, or Other Enforcement?
NOTES: Mandatory water shortage restrictions enforced in previous stages also apply to the current stage unless the current stage includes an equivalent action to reflect stricter measures, in which case the stricter measure would apply.				

8.2.4 Water Shortage Emergency Response

The District has taken significant steps to ensure it is prepared for catastrophic water supply interruption, including implementing local measures to increase supply reliability, developing planning documents that outline contingency actions, and coordinating with the Water Authority and other member agencies. The District has implemented local supply reliability measures through its shared ownership of the R.E. Badger treatment plant and access to raw water from Lake Hodges. Additionally, the District has access to raw and treated water from the Water Authority and multiple emergency interconnections with OMWD and SFID. To reduce impacts to the District's system during emergencies, the District has also invested in redundancy measures through additional interconnections with OMWD and construction of a parallel 36-inch and 30-inch transmission supply pipelines from the R.E. Badger treatment plant. The District also has three potable water storage reservoirs (R. E Badger treatment plant clearwell, Encinitas Ranch, and Balour), one raw water reservoir (San Dieguito reservoir), and is updating its Emergency Response Plan. The District is also able to offset some potable demand with it's recycled water system.
The Water Authority has implemented its Emergency Storage Project (ESP) to provide emergency water to its member agencies. The ESP involved installation of interconnections from key reservoirs to the Water Authority distribution system, including Lake Hodges, Olivenhain, and San Vicente. Supplies from the ESP may be provided to member agencies during outages or drought, as authorized by the Water Authority's Board of Directors. If the District anticipates that its available local surface water supply (Lake Hodges) is less than projected, the District can augment and offset the anticipated deficit by purchasing more raw and/or potable water from the Water Authority.

In addition to the WSCP stages described above, the District may declare a water shortage emergency pursuant to CWC Chapter 3 (commencing with Section 350) if the District determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting supplies to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. Upon declaration of a water shortage emergency under CWC Section 350, the District Board of Directors may adopt

and enforce regulations and restrictions on water use pursuant to CWC Section 353 and other applicable provisions of law to conserve the water supply for the greatest public benefit.

In the event that water supply conditions warrant broader governmental action, the District will coordinate with Encinitas, Water Authority, and the County of San Diego regarding the possible proclamation of a local emergency related to water supply conditions. Such coordination may include sharing water supply reliability assessments, drought risk assessments, and projected shortage information to support any emergency determinations made pursuant to the California Emergency Services Act and applicable local ordinances.

8.2.5 Legal Authorities

CWC Section 10632 (a)(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 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.*

CWC Section Division 1, Section 350

> *Declaration of water shortage emergency condition. The governing body of a distributor of a public water supply, whether publicly or privately owned and including a mutual water company, shall declare a water shortage emergency condition to prevail within the area served by such distributor whenever it finds and determines that the ordinary demands and requirements of water consumers cannot be satisfied without depleting the water supply of the distributor to the extent that there would be insufficient water for human consumption, sanitation, and fire protection.*

The District has adopted and incorporated its Water Shortage Contingency Plan (WSCP) into its municipal code (Encinitas Municipal Code Section 29.8), as adopted by Ordinance No. 2021-01. This ordinance provides the legal authority for the District to declare water shortage conditions, implement staged water use restrictions, and enforce conservation measures within its service area.

The District's authority to implement and enforce the WSCP is supported by California law, including Article X, Section 2 of the California Constitution and applicable provisions of the California Water Code (e.g., Sections 100, 350 et seq., and 375), which require the reasonable and beneficial use of water and authorize water suppliers to adopt and enforce conservation programs and emergency water shortage measures.

Under these authorities, the District may declare a water shortage condition, implement demand reduction actions, and enforce water use restrictions as necessary to protect available water supplies. Additional details regarding specific shortage stages, response actions, and enforcement provisions are provided in the District's WSCP, which is incorporated by reference.

The District coordinates with the City of Encinitas and the County of San Diego, within whose jurisdictions the District provides water service, as well as the Water Authority, regarding the potential proclamation of a local emergency during water shortage conditions. Coordination occurs through established communication protocols, including direct staff coordination, participation in regional and local emergency management efforts, and notification to appropriate city, county, and Water Authority representatives when water supply conditions warrant consideration of emergency actions. The District provides supporting information on water supply conditions, demand trends, and conservation measures, including results from the Annual Water Supply and Demand Assessment, to assist in evaluating emergency declarations and response actions. During declared water shortage conditions or drought emergencies, the District continues to coordinate with the City of Encinitas, the County of San Diego, and the Water Authority to ensure alignment of response actions, public communication, and implementation of conservation measures consistent with the District's WSCP.

8.3 Seismic Risk Assessment and Mitigation Plan

CWC Section 10632.5

> *(a) In addition to the requirements of paragraph (3) of subdivision (a) 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.*

CWC Section 10632.5 requires an urban water supplier to include within its UWMP 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 CWC 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. A copy of Section 4.3.4 of the Multi-Hazard Mitigation Plan for San Diego County (MHM Plan), which addresses seismic risk, as well as Section 5.8 of the MHM Plan which summarizes the potential hazards for Encinitas and related goals, objectives, and actions are included as Appendix A of the WSCP (Appendix M).

8.4 Communication Protocols

Water Code Section 10632

> *(a) Every urban water supplier shall prepare and adopt a water shortage contingency plan part of its urban water management plan consists of each of the following elements:*
>
> *(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.*

Following declaration of a Level 1 shortage, the District will implement its communication protocols, as outlined in the WSCP (available here https://ecode360.com/44490026). This may include, increase public education and outreach, newspaper notices, bill inserts, and website posts. If possible, the District should activate its public information campaign prior to a formal water shortage declaration to provide customers with advanced notice of impending water use restrictions. The District could continually update its webpage to notify residents of current and planned shortage levels and modify and expand the webpage, as necessary. Because the District aligns its water shortage response levels with the Water Authority, public outreach and messaging campaigns conducted by the Water Authority will also benefit the District as it triggers different levels.

8.5 Penalties, Charges, and Other Enforcement of Prohibitions

CWC Section 10632 (a)(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.*

The District has the ability to administer fines for each violation of the Water Supply Shortage Response Program. A summary of administrative penalties is provided in **Table 8-5**. Additionally, violations may also be subject to installation of a flow-restricting device on the meter, prosecution with a misdemeanor, or in excessive violations a discontinuance of service. Customers are able to report water waste to the District as outlined in the WSCP.

The District acknowledges its obligations under CWC Chapter 3.3 (commencing with Section 365), which authorizes the prohibition of excessive residential water use during periods of drought. Implementation of Chapter 3.3 may require administrative actions including monitoring of residential consumption levels, customer notification, billing system adjustments, enforcement processing, staff time, and public outreach. The District anticipates that compliance costs associated with Chapter 3.3 would be primarily administrative in nature and would be addressed through existing staffing and operational resources during declared drought conditions. If drought conditions necessitate formal enforcement actions under Chapter 3.3, additional costs may include customer communications, appeal processing, and potential updates to metering or data management systems. These costs would be incorporated into the District's operating budget during the applicable shortage period.

The District's enforcement process is governed by its adopted WSCP in Article 29 of the San Dieguito Water District Administrative Code, as adopted by Ordinance No. 2021-01. Customers receiving an administrative citation are afforded a formal hearing and appeal process pursuant to the District's adopted Administrative Citation Procedures in Article 30, including Sections 30.7 and 30.8. In addition, the District Administrative Code includes a general appeals framework in Article 28.

The District's adopted shortage response actions also include specified exceptions for certain water uses and customer categories, such as fire protection, erosion control, public works projects, environmental mitigation, livestock, and certain commercial growing activities, as described in Section 29.3. To the extent a customer seeks relief from enforcement or application of a restriction, such requests are addressed in accordance with the District's adopted code provisions and applicable appeal procedures.

TABLE 8-5: PENALTIES FOR VIOLATION OF ARTICLE 30

Violation	Penalty
First Violation	Warning (at sole discretion of General Manager)
Second Violation	$100 fine
Third Violation	$200 fine
Fourth Violation (and each additional violation)	$500 fine
NOTES: Within the current twelve-month period from the most recent violation.	

8.6 Monitoring and Reporting of Customer Compliance

CWC Section 10632(a)(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.*

During implementation of any WSCP stage, the District will monitor customer compliance through analysis of metered water use data. Residential and nonresidential consumption data are collected through the District's metering infrastructure and billing system and are reviewed in accordance with the applicable shortage stage requirements.

The District utilizes customer account-level consumption data to:

- Compare usage against baseline or allocation thresholds established for the applicable shortage stage,
- Identify excessive water use where applicable under CWC Chapter 3 and Chapter 3.3,
- Track customer response to mandatory restrictions,
- Document repeat violations, and
- Support enforcement actions.

Consumption data are collected on a regular billing cycle and are maintained in the District's billing and customer information system. During declared shortage conditions, District staff may perform additional review of usage trends and compliance metrics to ensure effective implementation of conservation measures.

8.7 Consumption Reduction Methods

Table 8-6 presents actions taken by the District to reduce demands during each shortage stage, consistent with the District's adopted WSCP. These actions include demand reduction measures, operational adjustments, and other shortage response actions designed to address potential supply shortages. Consistent with Water Code section 10632(a)(4)(A), (C), and (E), the District's shortage response actions include locally appropriate supply augmentation and operational measures, as well as demand management strategies intended to reduce the gap between available supplies and projected demands. Estimated demand reductions or supply benefits associated with these actions are reflected in **Table 8-6**. The District's consumption reduction methods, including rebate and incentive programs, are discussed in more detail in in **Chapter 9 – Demand Management Measures.** The District has the legal authority to implement these consumption reduction and shortage response actions in accordance with its adopted WSCP and CWC Section 10632(a)(4)(A), (C), and (E).

TABLE 8-6: SUPPLY AUGMENTATION AND OTHER ACTIONS

DWR Table 8-2: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	Shortage Gap Reduction Value (Percentage)	Additional Explanation or Reference *(optional)*
All Levels	Expand Public Information Campaign	5%	
All Levels	Reduce System Water Loss	< 1%	District's water losses are already very good compared to the water industry average (approximately 3% of total demand)
Level 2 – 6	Implement or Modify Drought Rate Structure or Surcharge	2%	May implement drought rates.
Levels 2 – 6	Other	5%	Customer billing inserts describing water shortage response actions.
Levels 3 – 6	Decrease Line Flushing	Variable	Line flushing is dependent on water quality needs. Depending on the water shortage and gap, alternative technologies for line flushing will be explored.
Levels 3 – 6	Other	Variable	The District may establish a water allocation for any property it serves.
Levels 3 – 6	Other	Variable	The District may suspend consideration of annexations to its service area.

DWR Table 8-2: Supply Augmentation and Other Actions			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier	Shortage Gap Reduction Value (Percentage)	Additional Explanation or Reference *(optional)*
Levels 4 – 6	Moratorium or Net Zero Demand Increase on New Connections	Variable	Suspends new potable water services and new temporary and permanent meters unless the District provides a program to offset new potable water demands (this exception does not apply to Level 6).

8.8 WSCP Refinement Procedures

CWC Section 10632 (a)(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.*

The District's WSCP is a living document and will need to be responsive to the effectiveness of conservation measures during a water shortage. The District will analyze monthly monitoring data and convene the Board of Directors to determine if adaptive measures need to be taken to achieve the necessary shortage reduction levels. In the case that the water shortage response measures are not working as desired, the District will add new actions or refine current actions to achieve greater savings. When updates are needed, the District staff will refine the plan and provide updated information and measures to the Board of Directors for approval.

8.9 Revenue and Expenditure Impacts

CWC Section 10632(a)(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.

If the WSCP is activated and water conservation measures are put into effect, the District would be operating with reduced water sales, the amount of which would vary depending on the declared drought response stage. These costs include staff time, administrative processing, customer notifications, and enforcement activities necessary

With the implementation of the water conservation measures, to ensure compliance with Water Code sections 366 and 10632(a)(8)(C), associated with the drought response levels, the District may incur additional expenses. Some of these additional expenditures may come from increased staffing, increased staff time needed to implement measures, or increased costs of new supplies, transfers, or exchanges (by either the District or the Water Authority). Increased expenses may be recovered by implementing volumetric penalties and civil penalties. When allocations are implemented, any person that uses water in excess of the allocation shall be subject to a penalty in the amount of twice the District's existing customers class commodity rate if under 115% of the allocation and four times the District's existing customers class commodity rate if over 115% in excess of the allocation. The penalty for excess water usage shall be cumulative to any other remedy or penalty that may be imposed for violation of Article 29, as discussed in Section 29.6 of the District's WSCP. Additionally, the District may use reserve funds or defer non-critical maintenance or projects to help reduce expenses in the face of reduced water sales during a water shortage emergency or to reallocate staff efforts to support drought response actions. Increased expenses may be recovered are described in the WSCP (available at https://ecode360.com/44490026).

The District incorporates impacts of drought on revenue and expenditures in their Cost of Service studies. If the water shortage projects impacts not currently prepared for in the existing adopted rates and WSCP, the District could adjust its water rate structure to help offset potential losses due to change in water supply. To do so would involve conducting a rate study in accordance with Proposition 218.

8.10 Special Water Feature Distinction

CWC Section 10632 (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.*

The District uses the term "ornamental" when referring to water features that are artificially supplied with water and are not swimming pools or spas (e.g., ornamental fountains, ornamental pond, ornamental like), as well as the term "decorative water feature." **Table 8-4** specifies shortage response actions that are applicable to these ornamental water features, distinct from pools or spas. Water shortage response actions also distinguish between ornamental water features and artificial water features that support aquatic life or livestock in the action itself.

8.11 Plan Adoption, Submittal, Availability, and Amendment Procedures

Water Code Section 10632 (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.*

Water Code Section 10642

> *Prior to adopting either, the urban water supplier shall make both the plan and water shortage contingency plan available for public inspection and shall hold a public hearing or hearings thereon…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.*

Water Code Section 10640. (b)

> *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 [Article 3 Sections 10640 -10645].*

Water Code Section 10644(a)(2)(b)

> *If an urban water supplier revises its water shortage contingency plan the supplier shall submit to the department a copy of it 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.*

The District's WSCP is codified in the San Dieguito Water District Administrative Code (Article 29) and was adopted by Ordinance No. 2021-01 on May 19, 2021. The WSCP was adopted following a public hearing and made available for public review in accordance with Water Code Section 10642. The WSCP was evaluated during the 2025 planning process and readopted after a public hearing on May 20, 2026 with no updates. The WSCP will be made available for the public in accordance with Water Code Section 10642.

Consistent with Water Code Section 10632(c), the adopted WSCP is made available to customers, the City of Encinitas, and other applicable agencies, and is accessible through the District's website and municipal code.

The District periodically reviews its WSCP as part of its ongoing water supply planning efforts and in coordination with preparation of the Urban Water Management Plan, in accordance with Water Code Section 10640(b). Any future amendments to the WSCP will be adopted following public review and hearing processes consistent with applicable provisions of the Water Code.

In the event the WSCP is revised, the District will submit the updated plan to the California Department of Water Resources within 30 days of adoption using the Department's electronic reporting tools, consistent with Water Code Section 10644(a)(2).

9. DEMAND MANAGEMENT MEASURES

CWC Section 10631

(e) Provide a description of the supplier's water demand management measures.

This description shall include all of the following:

(1)(A) … 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 measure 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.

CWC Section 526

(a) Notwithstanding any other provisions of law, an urban water supplier that, on or after January 1, 2004, receives water from the federal Central Valley Project under a water service contract or subcontract... shall do both of the following:

(1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings... located within its service area.

CWC Section 527

(a) An urban water supplier that is not subject to Section 526 shall do both the following:

(1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

The CWC defines "Demand Management" as water conservation measures, programs, and incentives that prevent the waste of water and promote reasonable and efficient use and reuse of available supplies. Demand management measures (DMMs) are developed and implemented for the purpose of reducing overall demand on a water supplier. Demand reductions can be achieved using several methods including water conservation, which is a relatively low-cost way to augment water supply that is typically easy to implement.

Water conservation is a key component in Southern California's strategy to meet water demand, and the District has demonstrated its commitment to water use efficiency and conservation by proactively supporting District, Water Authority, and MWD water conservation programs since the early 1990s. The District's efforts to promote and achieve water conservation include the DMMs specified by the CWC, as well as other programs tailored to meet the specific needs of the District's water customers.

The District has a long history of participating in water conservation programs. For example, the District had been a signatory member of the California Urban Water Conservation Council (CUWCC) since 1991 and prepared a biannual Best Management Practices Activity Report, which was also referred to as the CUWCC BMP Retail Coverage Report (BMP Report), up until 2015. The BMP Report was a good faith effort in implementing 14 urban water conservation Best Management Practices (BMPs) outlined by CUWCC that were intended to reduce long-term urban water demands. Reporting to the CUWCC is no longer required.

The District has implemented DMMs by participating in the conservation efforts of its two wholesale water suppliers, MWD and the Water Authority. While the District has offered some programs independently, most of its water conservation programs have been offered in partnership with MWD and the Water Authority.

Water conservation programs implemented by the District, either on its own or in combination with the Water Authority and MWD include the following:

- Water conservation rebates and incentives
- Commercial and residential conservation audits and surveys
- Professional and residential workshops
- Customer and student outreach and education
- Large landscape budgets (i.e., Turf Replacement Program)
- Water conservation contests (i.e., 4th grade school poster contest)

The District also continues to encourage voluntary conservation measures that were initially enacted during the 2012 to 2016 drought and again in 2021 - 2022. These voluntary measures are listed on the District's website and include reducing irrigation overspray waste, irrigating before 10am and after 6pm, and eliminating the washing of paved and hard surfaces. The District also encourages use of recycled or non-potable water when feasible.

Water conservation measures have evolved over time. In the 1990s, DMMs were focused on reducing indoor water use, mainly through replacement of low-efficiency plumbing fixtures (i.e., toilets, showerheads) with more efficient, low-flow fixtures. Once significant reductions in indoor water use were realized as a result of fixture replacement, new measures focused on reducing outdoor water use were implemented and remain the primary focus of today's DMMs.

According to the CWC Section 10631(e)(1)(B), the 2025 UWMP is required to have a description of demand management measures that includes: water waste prevention ordinances, water metering, public education and outreach, programs to assess and manage distribution system real losses, water conservation program coordination and staffing support, and other demand management measures that have significant impacts on water use. The District's water conservation efforts with respect to each of these DMMs are discussed below, with participation for the last five years provided to the extent data are available.

9.1 Water Waste Prevention Ordinances

The District's 2020 Water Supply Shortage Response Program includes the prohibition of water waste. Gutter flooding, single pass cooling systems in new connections, non-recirculating systems in all new conveyer car wash and commercial laundry systems, and non-recycling decorative water fountains are all prohibited by the District. The District also does not allow for "unreasonable" water use to occur, including but not limited to failure to repair a water leak after notification from the District, inefficient landscape irrigation, excessive runoff, low head drainage, and overspray of water flows onto non-targeted areas. Customers that contribute to "unreasonable" water use are subject to the violations and penalties described in Section 29.12 of the District's Water Supply Shortage Response Plan.

9.2 Water Metering

The District minimizes distribution system water losses by metering all customers within its service area. The average lifespan of a residential water meter is typically between 15

to 20 years according to the AWWA. After this period, meters may become less accurate and may need to be tested or replaced. The District aims to replace meters within 20 years, or upon failure. The District intends to use the deployment of Advanced Metering Infrastructure (AMI) to extend the useful life of the meters.

9.3 Tiered Rate Structure

Potable water rates for the District's residential customers are set volumetrically based on quantity of water use and customer class. In this tiered rate structure, efficient water use is billed at a lower price and higher water use is billed at progressively higher prices.

TABLE 9-1: SAN DIEGUITO WATER DISTRICT SCHEDULE OF WATER RATES AS OF JUNE 30, 2025

Customer Class	Residential Rate Tier	Potable Rate[1]	Recycled Rate[1]
Single Family	0-12 units	5.00	--
	13-20 units	7.25	--
	21-40 units	7.50	--
	41+ units	7.84	--
Multi-family	0-8 units	5.00	--
	9-12 units	7.25	--
	13-16 units	7.50	--
	17+ units	7.84	--
Agriculture	Uniform	6.40	5.56
Commercial	Uniform	6.40	5.56
Government	Uniform	7.31	5.56
Public	Uniform	7.31	5.56
Landscaping	Uniform	7.54	5.56
Construction	Uniform	7.66	5.56

Note: 1. Per Unit (one hundred cubic feet or 748 gallons)

Source: San Dieguito Water District Annual Financial Report and Independent Auditor's Reports for the Year Ended June 30, 2025.

9.4 Programs to Assess and Manage Distribution System Real Losses

The District diligently monitors and controls water system losses using standards set by the AWWA. According to the AWWA, the average water supplier experiences an annual water loss between 8 and 12 percent of its total demand. The District's average water loss was approximately 3.4 percent of total demand between fiscal year 2021 - 2025 (refer to

Section 4.3 – Distribution System Water Losses), which is below AWWA's average as well as the District's required SWRCB's water real water loss standard.

The District completed a condition assessment study of its asbestos cement (AC) pipelines in its system based on current known information. The District adopted an AC Pipeline Replacement Plan in 2025 which identified high priority pipelines to replace. The AC Master Plan is flexible because it uses a computer model that can be updated if new condition assessment information needs to inputted into the model which may lead to re-prioritizing pipe replacements.

9.5 Public Education and Outreach

The District collaborates with local organizations and water agencies to offer free workshops and events to encourage the public to reduce water consumption and help educate its customers on how to use water more efficiently. Some of the recently held or ongoing workshops and events consist of programs focused on outdoor water use conservation, including the WaterSmart Landscape Design for Homeowners Workshop, WaterSmart Landscaping Class Series, , Sustainable Landscapes Program, Qualified Water Efficient Landscaper, and Rain Harvesting Workshop. The District also co-hosted a Firescaping and Wildfire Preparedness workshop focused on water-efficient and fire-resistant landscaping practices with local fire departments and water agencies. In 2025, the District co-sponsored 3 landscape workshops with a total of over 80 attendees.

There are online education programs available to District customers that provide useful and informative videos, recommendations, and other resources to increase public awareness of water use reduction. The District offers sponsorships for Splash Lab visits to elementary schools within its service area for grades 4-6 through which it utilizes a hands-on approach to teach students about GIS, lab work, water quality, and water conservation The District participates in the North County Water Agencies' 4th Grade Poster Contest and participated in the WaterSmart Landscape Contest.

9.6 Water Conservation Program Coordination and Staffing Support

The District administers education, outreach, and incentive programs for its customers to help reduce water consumption. The District has a webpage dedicated to water conservation that includes contact information for the public (Phone: 760-633-2676, Email: conserve@sdwd.org). District staff includes a designated Water Resource Specialist.

9.7 Other Demand Management Measures

The District's Conservation and Outreach website provides information on the rebates and incentives available for customers. The majority of the rebates and incentives are available through MWD's SoCal WaterSmart Program. Some of the rebate and incentive programs offered through MWD include the Residential and Commercial Turf Replacement Programs, the Water Savings Incentive Program, the On-Site Retrofit Program, and the Commercial Rebates Program. The Turf Replacement Programs provide rebates to residential and commercial customers for removing existing grass and replacing it with organic, drought-tolerant landscaping. These programs aim to combine turf removal, irrigation modification, and rainwater retention or filtration to support reuse or soil absorption of rainwater, resulting in maximized water utilization and conservation. The Water Savings Incentive Program provides financial incentives for customized water efficiency projects including installation of commercial or industrial high-efficiency equipment, industrial process improvements, agricultural and landscape water efficiency improvements, and water management services. The On-Site Retrofit Program provides financial incentives to commercial, industrial, and institutional property owners, including HOAs, who convert potable water irrigation or industrial water systems to recycled water systems. Finally, the Commercial Rebates Program offers rebates for plumbing fixtures (e.g., premium high-efficiency toilets), landscape equipment, food equipment, HVAC equipment, and medical and dental equipment.

In partnership with MWD, the District provides free WaterSmart Checkups to residential and commercial customers. In addition, each year the District provides many free giveaways including hose nozzles, moisture meters, reusable water bottles, and reusable shopping bags. The District plans to continue its rebate and incentive programs, including programs offered through the Water Authority and MWD, so long as funding allows.

Lastly, the District partners with the CSD and ESD. Encinitas' operation and maintenance staff use recycled water to clean the sewer mains instead of potable water.

10. PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

This chapter describes addressing the CWC requirements for a public hearing, the UWMP adoption process, submitting an adopted UWMP, plan implementation, and the process for amending an adopted UWMP.

This chapter includes the following sections:

- Inclusion of all 2025 Data
- Notice of Public Hearing
- Public Hearing and Adoption
- Plan Submittal
- Public Availability
- Amending an Adopted UWMP and/or WSCP

10.1 Inclusion of All 2025 Data

2025 UWMPs must include the water use and planning data for the entire year of 2025. As noted previously, the District reported all data using the Fiscal Year of 2025, from July 1, 2024, to June 30, 2025.

10.2 Notice of Public Hearing

Water suppliers must hold a public hearing prior to adopting their Urban Water Management Plan. Following the public hearing and adoption of the 2025 WSCP, the 2025 UWMP was adopted following a public hearing on May 20, 2026.

10.3 Notice to Cities and Counties

CWC Section 10621

> *(b) Every urban water supplier required to prepare a plan shall… at least 60 days prior to the public hearing on the plan … notify any city or county within which the supplier provides waters supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan.*

CWC Section 10642

> *…The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies.*

The District sent notices to public agencies listed in **Table 10-1** on September 30, 2025 to notify them that they were starting the UWMP planning process. The District sent its 60-day notices (Notices) entitled, "San Dieguito Water District 2025 Urban Water Management Plan Update" (**Appendix C**) on March 13 to March 20, 2026. The Notices informed applicable agencies, cities, and counties that the District was planning on

adopting its UWMP after a Public Hearing on May 20, 2026. **Table 10-1** summarizes the cities and counties to which Notices were sent. The District provided notice to applicable cities and agencies and conducted public review and hearing processes for the UWMP in accordance with Water Code Sections 10621(b) and 10642. The District did not update it's WSCP during the 2025 UWWP process.

TABLE 10-1: LIST OF CITIES AND COUNTIES NOTIFIED

DWR Table 10-1 Retail: Notification to Cities and Counties		
City Name	60 Day Notice	Notice of Public Hearing
City of Encinitas	☑	☑
County Name	60 Day Notice	Notice of Public Hearing
San Diego County	☑	☑
NOTES: 60 Day Notices and Notice of Public Hearing were also sent to San Diego County Water Authority, San Elijo JPA, Santa Fe Irrigation District, Olivenhain Municipal Water District, Vallecitos Water District, Encina Wastewater Authority, and Rincon del Diablo Municipal Water District.		

10.4 Notice to the Public

CWC Section 10642

> *…Prior to adopting either [the plan or water shortage contingency plan], the urban water supplier shall make both of 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 [see below]. 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.*

Government Code 6066

Publication of notice pursuant to this section shall be once a week for two successive weeks. Two publications in a newspaper published once a week or oftener, with at least five days intervening between the respective publication dates not counting such publication dates, are sufficient. The period of notice commences upon the first day of publication and terminates at the end of the fourteenth day, including therein the first day.

The public hearing must be noticed in a local newspaper as prescribed in Government Code 6066. This notice must include time and place of hearing, as well as the location where the plan is available for public inspection.

The District published the Notice to the Public on May 1, 2026 and May 8, 2026 in The Coast News Group local newspaper publication. In addition, the District posted the Notice of Public Hearing and made a draft copy of the 2025 UWMP and WSCP available on its website at (https://www.sdwd.org) for public review. A copy of the published Notice of Public Hearing and the proof of publication is attached as **Appendix I**. The District also notified its customers through its quarterly newsletter.

10.5 Public Hearing and Adoption

CWC Section 10642

…Prior to adopting either, [the plan or water shortage contingency plan], 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.

CWC 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.

CWC Section 10642

…After the hearing or hearings, the plan or water shortage contingency plan shall be adopted as prepared or as modified after the hearing.

Because the public hearing may take place at the same meeting as the adoption hearing of the District Board (Encinitas City Council), the District will hold one meeting with separate agenda items for both the public hearing and, following the public hearing, the adoption of the 2025 WSCP and then the 2025 UWMP. At the Public Hearing, District Staff will present the highlights of the 2025 WSCP and the 2025 UWMP to the Board and the Board will receive comments on the draft UWMP. Based on DWR requirements, the WSCP was evaluated during the 2025 planning process and readopted after a public hearing on May 20, 2026 with no updates.

The District Board of Directors approved resolutions to adopt the 2025 WSCP and the 2025 UWMP in accordance with District Staff recommendations. A copy of the 2026 Agenda and the District's Agenda Report with recommended Staff action is provided as **Appendix J**, while the resolution approving the 2025 WSCP and 2025 UWMP are included as **Appendix K**.

The final adopted 2025 UWMP are posted on the District's website at https://encinitasca.gov/Government/Departments/San-Dieguito-Water-District/Engineering-Planning.

10.6 Plan Submittal

CWC Section 10621

> *(e) Each urban water supplier shall update and submit its 2025 plan to the department by July 1, 2026...*

CWC 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.*

CWC Section 10635

> *(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.*

2025 WSCPs and UWMPs must be submitted to DWR within 30 days of adoption and by July 1, 2026. UWMP submittal should be done electronically through the WUE Data Portal, an online submittal tool that will be updated for 2025 UWMPs and available in adequate time for UWMP submittal. In accordance with CWC Section 10644, District Staff will submit the 2025 WSCP and UWMP electronically through the WUE Data Portal online submittal

tool within 30 days of adoption. The District will also submit copies of its adopted 2025 WSCP and UWMP to the California State Library, Encinitas, and County of San Diego within 30 days of adoption.

APPENDIX A: DISTRICT ELECTRONIC ANNUAL REPORT (2025)

Not Available as of 3/26/2026

APPENDIX B: REGIONAL ALLIANCE COOPERATIVE AGREEMENT

APPENDIX C: DISTRICT NOTIFICATION LETTERS TO CITIES, COUNTIES, AND OTHER AGENCIES AND ORGANIZATIONS

APPENDIX D: DISTRICT WATER LOSS WORKSHEET

APPENDIX E: INTEGRATED REGIONAL WATER MANAGEMENT (IRWM) CLIMATE CHANGE VULNERABILITY ASSESSMENT

APPENDIX F: LAKE HODGES WATER AGREEMENT

APPENDIX G: DWR 2025 UWMP REPORTING TABLES - DRAFT

APPENDIX H: WATER AUTHORITY'S DRAFT REDUCED RELIANCE ON THE DELTA

APPENDIX I: NOTICE OF PUBLIC HEARING

Not Available as of 3/26/2026

APPENDIX J: DISTRICT AGENDA REPORT FOR PUBLIC HEARING AND ADOPTION MEETING

Not Available as of 3/26/2026

APPENDIX K: DISTRICT RESOLUTION TO ADOPT UWMP

Not Available as of 3/26/2026

APPENDIX L: DWR 2025 UWMP REPORTING CHECKLIST

APPENDIX M: WATER SHORTAGE CONTINGENCY PLAN

Woodard & Curran

woodardcurran.com