

URBAN WATER MANAGEMENT PLAN

2025



moulton niguel water district

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Acronyms and Definitions

AF	acre-feet
AFY	acre-feet per year
ASL	above sea level
cfs	cubic feet per second
FY	fiscal year
GPCD	gallons per capita per day
GPF	gallons per flush
HCF	hundred cubic feet
in	inches
kW	kilowatt
kWh	kilowatt-hour
MAF	million-acre feet
mg	million gallons
mgd	million gallons per day
MW	megawatt
sq. ft	square feet

AB	Assembly Bill
AI	Artificial Intelligence
AMI	Advanced Metering Infrastructure
AMP	Allen McColloch Pipeline
AWT	Advanced Wastewater Treatment
AWWA	American Water Works Association
Baker	Baker Water Treatment Plant



Basin	Colorado River Basin
CAMP4W	Climate Adaptation Master Plan for Water
CDFW	California Department of Fish and Wildlife
CDR	Center for Demographic Research
CESA	California Endangered Species Act
CII	Commercial, Industrial, and Institutional
CIP	Central Intertie Pipeline
CMMS	Computerized Maintenance Management System
COG	Council of Governments
CRA	Colorado River Aqueduct
CTP	Coastal Treatment Plant
CWC	California Water Code
DCP*	Delta Conveyance Project
Delta	Sacramento-San Joaquin Delta
Diemer	MWD's Robert B. Diemer Water Treatment Plant
DMM	Demand Management Measures
DOF	Department of Finance
DOI	Department of the Interior
DPR	Direct Potable Reuse
DRA	Drought Risk Assessment
DROA	Drought Response Operations Agreement
DWR	Department of Water Resources
EIS	Environmental Impact Statement



EPA	United States Environmental Protection Agency
ET	Evapotranspiration
ETWD	El Toro Water District
FLOW	Future Leaders of Water
GIS	Geographic Information Systems
GWRS	Groundwater Replenishment System
HOA	homeowner association
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IPR	Indirect Potable Reuse
IRP	Integrated Resources Plan
IRWD	Irvine Ranch Water District
ITP	Incidental Take Permit
JBLTP	J.B. Latham Treatment Plant
JPA	Joint Powers Authority
JTM	Joint Transmission Main
LRWRP	Long Range Water Reliability Plan
MJHMP	Multi-Jurisdictional Hazard Mitigation Plan
MNWD	Moulton Niguel Water District
MOU	Memorandum of Understanding
MWD	Metropolitan Water District of Southern California
MWDOC	Municipal Water District of Orange County
NEW	Net Energy Metering



OASIS	Optimized, Adaptive, Sustainable, and Integrated Supply
OCWD	Orange County Water District
PFAS	Per- and polyfluoroalkyl substances
PH&S	Public health and safety
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement
QWEL	Qualified Water Efficient Landscaper
R6	El Toro Reservoir
Reclamation	Bureau of Reclamation
RES-BCT	Renewable Energy Self-Generation Bill Credit Transfer
RHNA	Regional Housing Needs Assessment
RUWMP	Regional Urban Water Management Plan
SB	Senate Bill
SBX7-7	Water Conservation Act of 2009 (Senate Bill X7-7)
SCAB	South Coast Air Basin
SCADA	Supervisory Control and Data Acquisition
SCE	Southern California Edison
SCWD	South Coast Water District
SDCWA	San Diego County Water Authority
SDGE	San Diego Gas and Electric
SJBA	San Juan Basin Authority
SMWD	Santa Margarita Water District
SOC	South Orange County



SOCWA	South Orange County Wastewater Authority
SWP	State Water Project
SWRCB	State Water Resources Control Board
TOU	time-of-use
USGS	United States Geologic Survey
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
WBBRS	Water Budget Based Rate System
WET	Water Education Today
WSAP	Water Shortage Allocation Plan
WSCP	Water Shortage Contingency Plan
WSS	Water Supply Strategy
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

**DCP may also be used for Drought Contingency Plan in regard to Colorado River water negotiations.*



Executive Summary



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Executive Summary:

Layman Description of the 2025 UWMP

ES. 1 Urban Water Management Plan

Moulton Niguel Water District (MNWD, the District) has prepared the following 2025 Urban Water Management Plan (UWMP, Plan) in accordance with the requirements outlined in the California Water Code (CWC) as well as the 2025 Guidebook provided by the Department of Water Resources (DWR). This plan serves as an update to the MNWD 2020 UWMP.

The UWMP is a component of MNWD's water resources planning efforts which are supported by multiple departments at MNWD. These cross-department planning efforts include:

- **2025 Long Range Water Reliability Plan Update** (2025 LRWRP Update) which provides an adaptive management roadmap to ensure reliable water supplies;
- **Long Range Financial Plan** ensures that sufficient financial resources are available for critical operation expenses and necessary capital investments, while maintaining a strong financial position;
- **Recycled Water Optimization Study** that is used to identify new opportunities to further utilize wastewater for beneficial uses; and
- **2025 UWMP**, this document, which outlines collaborative approaches across California's water providers to effectively plan for varying water supply futures.

The 2025 UWMP includes an assessment of MNWD's water service reliability and describes MNWD's water sources, water supply system, demand management measures, recycled water opportunities, as well as other relevant data used in MNWD's planning efforts.

ES. 2 Water Services

MNWD delivers high quality drinking water, recycled water, and wastewater services to nearly 170,000 customers in Laguna Niguel, Aliso Viejo, Mission Viejo, Laguna Hills, Dana Point, and San Juan Capistrano. The District's water needs are met by a combination of imported potable water and locally produced recycled water.

The District currently relies on imported water provided by Metropolitan Water District of Southern California (MWD) through its member agency, the Municipal Water District of Orange County (MWDOC). Imported water represents approximately 79 percent of MNWD's total water supply. MWD's water supply originates from two principal sources: the Colorado River via the Colorado River Aqueduct (CRA) and the State Water Project (SWP)

located in Northern California. Recycled water provides approximately 21 percent of the District's water supplies and is produced at the District's two local treatment plants: 3A and the Regional Treatment Plant (RTP).

ES. 3 Water Uses

Since 2005, the total water use (customer demands) have decreased, even with increasing population. District customers have collectively reduced total water use by nearly 15,000 acre-feet over the past 20 years. Values for water supply and demand in this 2025 UWMP are presented in acre-feet (AF) which is the volume of water that is used to cover one acre of land by a depth of 1 foot. 1 AF is equivalent to 325,851 gallons. In the MNWD service area, 1 AF would typically serve 2-3 homes for a year. For example, in the past fiscal year (July 2024 to June 2025) customers used 22,235 AF of potable water.

California has experienced significant dry periods over the last 100 years. These changes in climate and hydrologic conditions create some uncertainty for future water use projections. As temperatures and rain events become more unpredictable, with warmer summers and more intense storm events, customer demands may also become less predictable. The District continues to invest in and promote outdoor rebate programs to improve water use efficiency by adding low-water-use plants to landscapes, using improved irrigation devices, and providing resources to help reduce outdoor water use demands. These efforts ensure that sufficient water supplies are available to meet demands under varying conditions. In addition to these efforts, the District also has a Water Shortage Contingency Plan (WSCP) to guide response actions in times of drought or potential water shortages.

ES. 4 Water Shortage Contingency Plan

The WSCP is a stand-alone document that may be used during times of drought, water shortage, or water emergency. The WSCP describes conditions that constitute a water shortage and suggests actions for managing water supply and demand. Six shortage levels are included with range of shortage from 10, 20, 30, 40, 50, and greater than 50 percent. Each stage includes demand reduction measures to address each level of shortage. These demand reduction measures include public education campaigns, expanded outreach and water efficiency programs, as well as applied conservation penalties, among others.

ES. 5 Conclusions and Key Findings of the 2025 UWMP

The 2025 UWMP concludes that total available water supplies for MNWD are sufficient to meet projected demands through 2050, under normal year, single dry-year, and multiple dry year conditions. MNWD has determined that imported supplies, as supported by MWD's and MWDOC's 2025 UWMPs, are sufficient to meet demands for a five year consecutive drought. MNWD will continue to support water use efficiency programs, maintain emergency preparedness, and seek out opportunities to increase local supplies.

Section 1: Introduction

1.1 Urban Water Management Plan Requirements

The following 2025 Urban Water Management Plan (UWMP) has been prepared in compliance with California Water Code (CWC) Sections 10610 through 10657, the Urban Water Management Planning Act (Act). The UWMP Act requires that every urban water supplier providing potable municipal water to more than 3,000 customers or supplying more than 3,000 acre-feet (AF) of water annually to prepare, adopt, and file an UWMP. The UWMP shall be filed 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.

Moulton Niguel Water District (MNWD, the District) prepared this UWMP as an update to the 2020 UWMP. This UWMP describes and evaluates sources of supply, reasonable and practical efficient uses, reclamation, and demand management activities within the District's service area. The purpose of the UWMP is to manage efficient use of urban water supplies, continue to promote water use efficiency programs, verify that sufficient water supplies are available for future beneficial use, as well as provide mechanisms for emergency response during shortage conditions. Specifically, this UWMP includes water supply and demand projections for a 25-year planning horizon. Results are presented in five-year increments and identify supplies needed to meet existing and future demands.

1.2 Organization and Section Summaries

The District developed this UWMP using the 2025 Department of Water Resources (DWR) Guidebook. The DWR Guidebook provides a framework for urban water suppliers to comply with state law, as well as assist in the review of submitted UWMPs. The DWR Guidebook includes a checklist of UWMP requirements and is designed to assist DWR in its review of submitted UWMPs. The UWMP Checklist, which identifies the location of Act requirements in this Plan, is included in **Appendix A**. In addition, DWR developed standardized tables for the electronic submittal of data to DWR. Copies of the standardized tables are included in this UWMP as **Appendix B**.

The 2025 UWMP is organized in accordance with the Guidebook, and contains the following sections:

Section 1: Introduction

Provides an overview of UWMP requirements, recent legislation changes since 2020, and organization of the document.

Section 2: Plan Preparation

Identifies the District's process for developing the UWMP; including units, methods, and coordination efforts conducted.

Section 3: System Description

Includes MNWD's history and organizational structure, service area boundaries, population projections, climatic conditions, and projected land use.

Section 4: Water Use Characterization

Quantifies and defines current and projected urban water uses within the District's service area. Water supply and demand are described in detail.

Section 5: SBX7-7 Baselines and Targets

Reviews MNWD's SBX7-7 baselines and targets, demonstrates compliance with 2020 conservation targets, and documents relevant tables and verification forms.

Section 6: Water Supply Characterization

Illustrates MNWD's water supply portfolio including planned and potential future water supply projects. Potential projects consist of local water coordination efforts and expanding recycled water options.

Section 7: Water Service Reliability and Drought Risk Assessment

Reports on the reliability of District water system and supply projects for the next 25 years. Includes analysis for normal, single dry year, and five multiple dry year scenarios; and a five-consecutive year drought starting in 2026 (Drought Risk Assessment, DRA).

Section 8: Water Shortage Contingency Planning

Summarizes key components of the District's adopted Water Shortage Contingency Plan (WSCP). The WSCP is attached as **Appendix C**.

Section 9: Demand Management Measures

Documents MNWD's efforts to promote water use efficiency through demand management measures (DMM).

Section 10: UWMP Adoption and Submittal Process

Records the steps taken by the District to adopt and submit the UWMP in compliance with the CWC and UWMP Act.

1.3 Other Planning Efforts

An UWMP may serve as a foundational document and source of information for a Water Supply Assessment (Water Code Section 10910 et seq.), and a Written Verification of Water Supply (Water Code Section 66473.7). Both statutes require detailed information regarding water supply availability to be provided to city and county decision makers prior to approval of specified large development projects. Additionally, a UWMP also serves as a:

- Long-range planning document for water supply;
- Long-range planning documents for water use efficiency;
- Source data for development of a regional water plan;

- Source document for cities and counties as they prepare their General Plans;
- Key component of an Integrated Regional Water Management Plan; and
- Condition to qualify for receipt of certain State grant funds.

In addition to the 2025 UWMP, the District prepares a Long-Range Water Reliability Plan (LRWRP) Update, Water Shortage Contingency Plan (see **Section 8, Appendix C**), as well as coordinates with regional agencies for additional planning documents. Regional planning documents consist of the Metropolitan Water District of Southern California (MWD) and Municipal Water District of Orange County (MWDOC) 2025 UWMPs, among others.

2025 Long Range Water Reliability Plan Update

The District's 2025 LRWRP Update evaluates how water demands and water supply may change over the next 30 years. The 2025 LRWRP Update is a high-level planning document intended to inform decision-makers regarding the benefits of future water resource investments in the face of climate variability and threats to water reliability.

The 2025 LRWRP Update provides a framework for evaluating proposed water supply projects that may account for and help address future risks and uncertainty. Utilizing the 2025 LRWRP Update results in improved water resource management and provides a roadmap for ensuring reliable and cost-effective long-term water supplies for customers.

The 2025 LRWRP Update is available on the District's website:

<https://www.mnwd.com/reports-publications/>

Water Shortage Contingency Plan

CWC Section 10632 requires that every urban water supplier prepare and adopt a WSCP, which includes an approach to conducting an Annual Assessment, and the shortage response actions the District would take in response to six standard water shortage levels. The WSCP is a guide for the District's intended actions during water shortage conditions. It is meant to improve preparedness for droughts and other impacts on water supplies by describing the process used to address varying degrees of water shortages.

The District's WSCP provides the plan in the event of a declared water emergency or enactment of more stringent restrictions on water use. The WSCP details six potential levels of water shortage and the specific actions the District may take to reduce water use and increase additional supplies to address the water shortage. A plan for communicating water use mandates to our customers is also presented within the WSCP. The complete WSCP is included in **Appendix C**.

Metropolitan Water District of Southern California 2025 UWMP

MWD is the regional wholesale provider of imported water that provides water supplies to MWDOC. MWD's 2025 UWMP is also considered as a supplemental reference document to

MNWD's 2025 UWMP and is expressly referenced and incorporated herein. MWD's UWMP is available on the MWD website: <https://www.mwdh2o.com/how-we-plan/>

Municipal Water District of Orange County 2025 UWMP

MWDOC is the regional wholesale provider of imported water that provides water supplies to the District. The CWC requires coordination in preparation of UWMPs with any wholesale water providers or other agencies that share common infrastructure for the delivery of water, wastewater and recycled water services. Thus, MWDOC's 2025 UWMP is considered a supplemental reference to this 2025 UWMP and is expressly referenced and incorporated herein. MWDOC's UWMP can be accessed at the following website:

<https://www.mwdoc.com/your-water/overview/>



Figure 1-1. Sacramento San Joaquin Delta, California

Delta Plan Participants and Covered Actions

Any urban water supplier that anticipates participating in or receiving water from a proposed project (*covered action*) such as a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento San Joaquin Delta (Delta) may provide information in their UWMPs to demonstrate consistency with Delta Plan Policy (WR P1), Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (**Figure 1-1**). This information is

then used to certify that the supplier is contributing to reduced reliance on the Delta as required by Delta Plan Policy (WR P1).

Delta Plan Policy (WR P1) is one of fourteen regulatory policies in the Delta Plan. The Delta Plan is a comprehensive, long-term, legally enforceable plan guiding how federal, state, and local agencies manage Delta water and environmental resources. The Delta Plan was adopted in 2013 by the Delta Stewardship Council (DSC). Delta Plan Policy (WR P1) identifies UWMPs as the tool to demonstrate consistency with state policy to reduce reliance on the Delta for a supplier that carries out or takes part in a covered action.

The District supports MWD in its participation in the Delta Conveyance Project. The proposed Delta Conveyance Project would develop new diversion and conveyance facilities in the Delta necessary to restore and protect the reliability of water deliveries. Modernizing Delta conveyance is part of the California Water Resilience Portfolio. The proposed Delta Conveyance Project (DCP) would provide an alternative diversion of water from the Delta and would be operated in coordination with the existing south of Delta pumping facilities.

The proposed DCP is considered a covered action. As such, the District is providing information that can be used in the future certification process to demonstrate consistency with Delta Plan Policy (WR P1). Please refer to **Appendix D** Reduced Delta Reliance Reporting, for additional details on consistency with the Delta Plan.

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Section 2: Plan Preparation

This chapter provides information on the process for developing the 2025 UWMP, including individual or regional planning, fiscal or calendar year reporting, units of measure, and coordination efforts with other agencies.

2.1 Basis for Preparing a Plan

The UWMP Act requires every “urban water supplier” to prepare and adopt an UWMP, to periodically review its UWMP at least once every five years and make any amendments or changes which are indicated by the review. An “urban water supplier” is defined as a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers (measured by the number of service connections) or supplying more than 3,000 acre-feet per year (AFY). In accordance with the CWC, MNWD is an urban water supplier with 3,000 or more service connections and is required to prepare an UWMP every five years.

The District manages Water System CA 3010073. As shown in **Table 2-1**, the District provided water to 54,089 potable and 1,495 recycled customer connections and supplied 22,235 acre-feet (AF) of potable water and 5,665 AF of recycled water in FY 2024-2025 to a population of nearly 170,000 customers. Due to both the number of customers served and volume of water supplied, the District is considered an urban water supplier as defined by the CWC Section 10617.

Table 2- 1. Public Water System

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
CA 3010073	Moulton Niguel Water District	54,089	22,235
Total		54,089	22,235
NOTES: Units of measure are in AF. Volume of water includes potable water connections. There are an additional 1,494 recycled water connections with 5,665 AF of water use in FY 24-25.			

Section 10620(d)(1) of the UWMP Act allows urban retail water suppliers to plan, comply, and report on a regional basis, on an individual basis, or both. The District prepared this 2025 UWMP on an individual reporting basis covering only the District’s service area (**Table 2-2**). The District has notified and coordinated with appropriate regional agencies

and stakeholders. These include the Municipal Water District of Orange County (MWD OC), neighboring agencies, and cities served by MNWD water (**Figure 2-1**). MNWD is also a member of the Orange County 20x2020 Regional Alliance.

Table 2- 2. DWR Submittal Table, Type of Plan

Submittal Table 2-2: Plan Identification		
Select One	Type of Plan	Name of Regional Alliance or RUWMP
☒	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	Orange County 20x2020 Regional Alliance

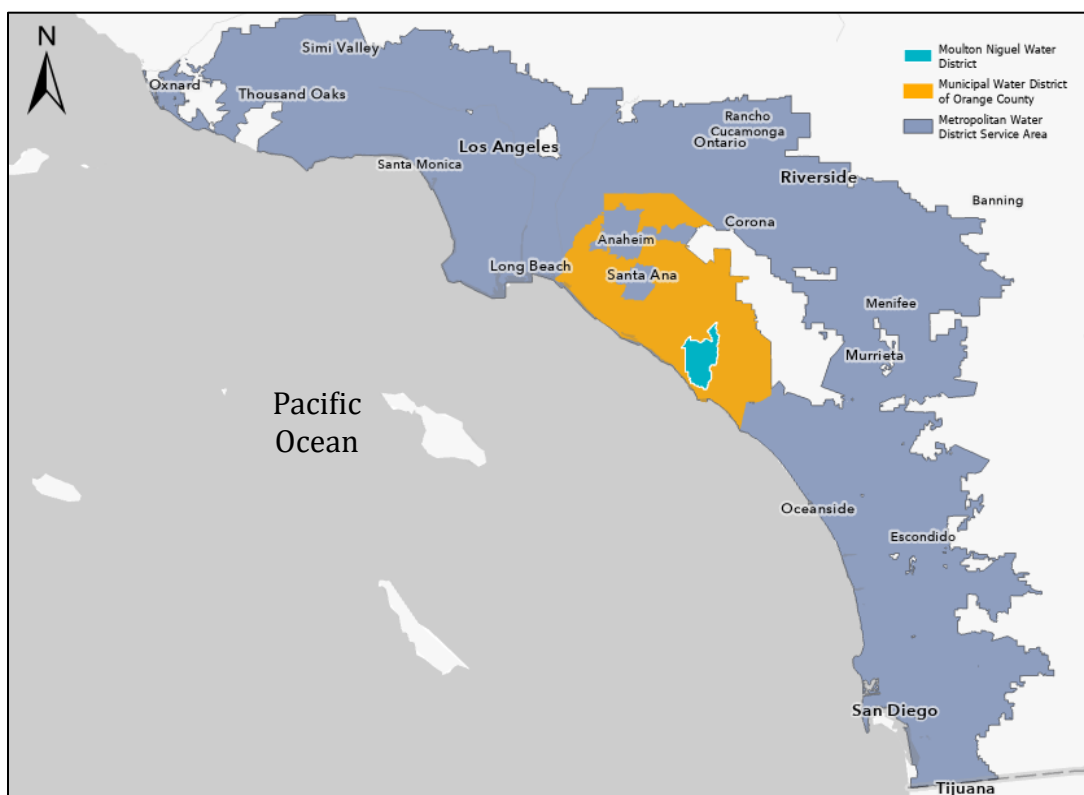


Figure 2- 1. Regional Service Area Map

2. 2 Standard Tables, Year, and Units of Measurement

Information prepared for and presented in this UWMP is reported based on a fiscal year (starting July 1 and ending June 30) and water volumes are presented in AF, as summarized in **Table 2-3**. One acre-foot (AF) is the volume of water that is used to cover one acre of land by a depth of 1 foot. 1 AF is equivalent to 325,851 gallons. In the MNWD service area, 1 AF would typically serve 2-3 homes for a year.

Table 2- 3. MNWD Supplier Identification

Submittal Table 2-3: Supplier Identification	
Type of Supplier	
☒	Supplier is a retail supplier
Fiscal or Calendar Year	
☒	UWMP Tables are in fiscal years
Date that the fiscal year begins (mm/dd)	
07/01	
Units of measure used in UWMP	
Unit	AF
NOTES: Fiscal year begins on July 1st of each year.	

2.3 Coordination and Outreach

The District coordinated the preparation of this UWMP with the cities in the service area, and MWDOC (**Table 2-4**). The District coordinated with MWDOC by providing the wholesale agency with the District’s water use projections and participating in demand projections. On January 29, 2026, District staff informed the cities the District would be reviewing the UWMP and making changes to the plan for the 2025 Update. Cities were invited to provide input and share comments, specifically regarding city land-use assumptions included in new development projections as part of the District’s water demand forecast. The notification provided an opportunity to submit comments and directed recipients where to access the draft document prior to adoption.

The District also encouraged public participation in the development of the 2025 UWMP with opportunities for public review and comment. Additional information regarding outreach and public participation is included in **Section 10: Urban Water Management Plan Adoption Process**.

Table 2- 4. Wholesale Supplier Information Exchange

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use in accordance with Water Code Section 10631 (h).
Wholesale Water Supplier Name
Municipal Water District of Orange County (MWDOC)

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Section 3: System Description

3.1 History of the District

Moulton Niguel Water District (MNWD, the District) was formed on November 16, 1960, under the provisions of the California Water District Law, Division 13, of the Water Code of the State of California. The District was formed by local ranchers to secure a reliable water supply for their herds. Previously, the lands within the service area were primarily utilized for livestock grazing, with a small area devoted to citrus and field crop production limited by a lack of adequate local water supply.

In 1961, the District entered into several agreements with surrounding water agencies to bring reliable water supplies to the area including an agreement to bring treated water to the District from East Orange County Feeder Number 2 (EOCF #2) through the Tri-Cities Transmission Main, now known as the Joint Transmission Main (JTM). The District sold its first waterworks bond for \$6,700,000 to fund construction of the imported water supply pipelines. Construction of the JTM was a joint project between the District, Tri-Cities Municipal Water District (since dissolved in 2000), South Coast Water District (SCWD), Irvine Ranch Water District (IRWD), and Orange County Water Works #4 (since annexed to Santa Margarita Water District). In 2000, following the dissolution of Tri-Cities, SCWD assumed operation of the pipelines and infrastructure on a contract basis for what is now identified as the Joint Regional Water Supply System. The JTM was MNWD's primary source of water for many years, later followed by the construction of the Allen-McColloch and South County Pipelines.

In 1964, an amendment to the California Water District Act was passed that allowed water districts to collect and treat sewage and develop water reclamation programs. As early as 1968, a study was authorized to consider the use of treated secondary wastewater effluent for irrigation at the El Niguel Golf Course. In 1976, the District's 3A treatment plant was the site for the pilot "Bullrush Project" undertaken in conjunction with the Biological Water Purification Company to perform advanced "tertiary" wastewater treatment for use on landscapes. Wastewater was used to offset increasing irrigation demands, as local populations experienced substantial growth throughout the 1970s and 1980s.

Leadership and Governance

Today, the District is governed by an elected Board of seven Directors (Board). The Board is dedicated to providing the service area with safe and reliable water services, wastewater collection and treatment, as well as access to the latest water efficiency and conservation programs. Board members are publicly elected by registered voters within the District's service area for staggered four-year terms. Policymaking and legislative authority are

vested with the Board, who has the authority to set rates and charges for water, recycled water, and wastewater services.

In addition, the Board is responsible for governing the operation of the District, adopting the budget, appointing committees, and hiring the General Manager. The General Manager is responsible for carrying out the policies of the Board, for overseeing day-to-day operations, and for hiring staff for the various divisions.

3.2 Service Area

The District has grown tremendously since its formation; initially established by local ranchers to provide water service to eight accounts, the District now provides water, recycled water, and wastewater service to nearly 170,000 people within a 37 square mile service area covering portions of six cities in southern Orange County. The District service area is built-out and includes the City of Laguna Niguel and portions of the cities of Aliso Viejo, Laguna Hills, Mission Viejo, San Juan Capistrano, and Dana Point. While operations have evolved with the growth of the MNWD service area, the District’s primary focus has remained; to ensure that customers have a reliable, sustainable, and cost-effective water supply. **Figure 3-1** shows the service area and the six cities served by MNWD.

Population

Forecast population for MNWD from 2025 to 2050 was provided by the Center for Demographic Research at California State University Fullerton (CDR). In the latest population projections, the MNWD service area is shown to be steady or decreasing in population. Projections are prepared by CDR using the United States Decennial Censuses, State Department of Finance data, as well as Orange County projections. In the latest methodology updates, CDR states that areas experiencing decreasing population are due to the age structure of residents, declining births, increased mortality, and lower migration rates. As there are fewer and fewer areas to develop within MNWD’s service area, any new population growth will primarily come from redevelopment and infill activities. Despite a decrease in population, development of new housing is projected to occur within the service area. **Table 3-1** shows the latest projections in 5-year increments to year 2050.

Table 3- 1. Population Projections (2025-2050)

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050
	168,315	167,762	167,396	166,548	164,639	162,767
NOTES: Projections are prepared by Center for Demographic Research (CDR). Data reflects MWD OC Retail Service Provider Boundaries as of January 2025.						

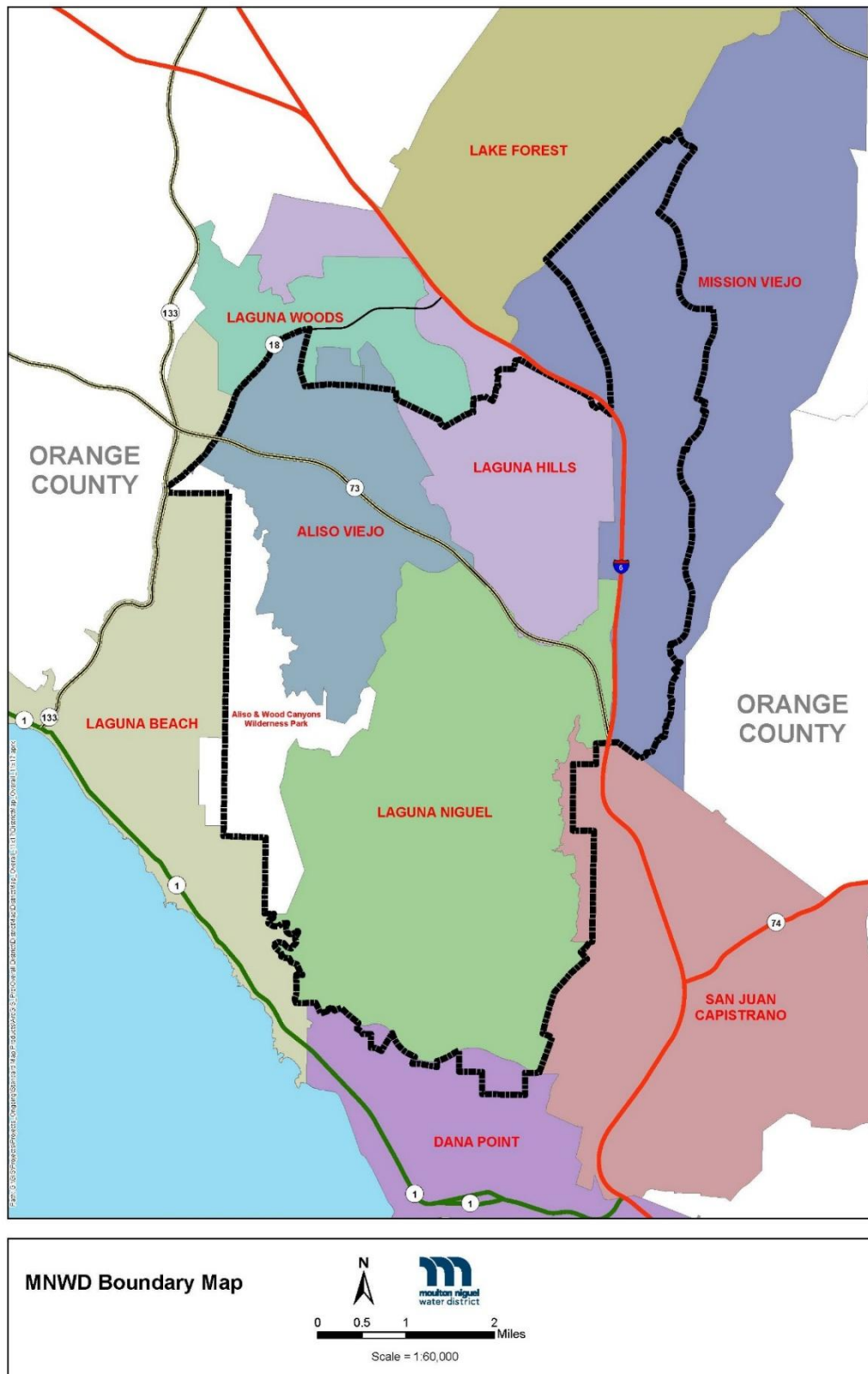


Figure 3- 1. District Service Area

Local Climate

Located in an area known as the South Coast Air Basin (SCAB), the District's service area consists primarily of residential customers and is characterized by mild, dry summers and winters. The SCAB is a semi-arid environment with mild winters, dry and warm summers, and moderate rainfall. The rainy seasons occur in the semi-permanent, high-pressure zone of the Eastern Pacific Ocean. The usually mild climatological pattern is interrupted by periods of extremely hot weather, winter storms, or Santa Ana winds. Approximately 74 percent of the total annual average precipitation occurs December through March. **Table 3-2** summarizes annual average weather. The average daily maximum temperature is 75 °F, with an annual average precipitation of 13.8 inches.

Table 3- 2. MNWD Average Annual Weather Data (2020-2025)

Service Area	Average Maximum Temperature (°F) ¹	Average Precipitation (inches) ¹
January	67.4	2.3
February	68.2	2.6
March	67.2	3.3
April	71.6	1.2
May	72.5	0.4
June	78.2	0.1
July	83.5	0.1
August	85.9	0.2
September	84.1	0.2
October	79.8	0.3
November	73.7	0.7
December	67.6	2.4
Annual Average	75.0	13.8

(1) Data obtained from CIMIS, Irvine Station #75, averaged from 2020 to 2025.

Evapotranspiration (ET) is the combination of water that is lost from the soil through evaporation and through transpiration from plants as a part of their metabolic processes. It is an indicator of the amount of water that must be replaced for plants to stay alive and grow. ET varies daily with changes in temperature, relative humidity, solar radiation, and wind. As the days get longer and warmer, the plant's need for water gradually increases. MNWD service area ranges in elevation from 140 feet above sea level (ASL) to 930 feet ASL. To reflect the significant variation in elevation, 111 micro-zones were developed within MNWD's service area, each with distinct water needs that can be derived from ET. ET is weighted by the number of accounts in every microzone. This variability in ET translates to fluctuating watering needs for landscape irrigation for homes, commercial properties, parks, and golf courses between the various micro-climates (**Figure 3-2**).

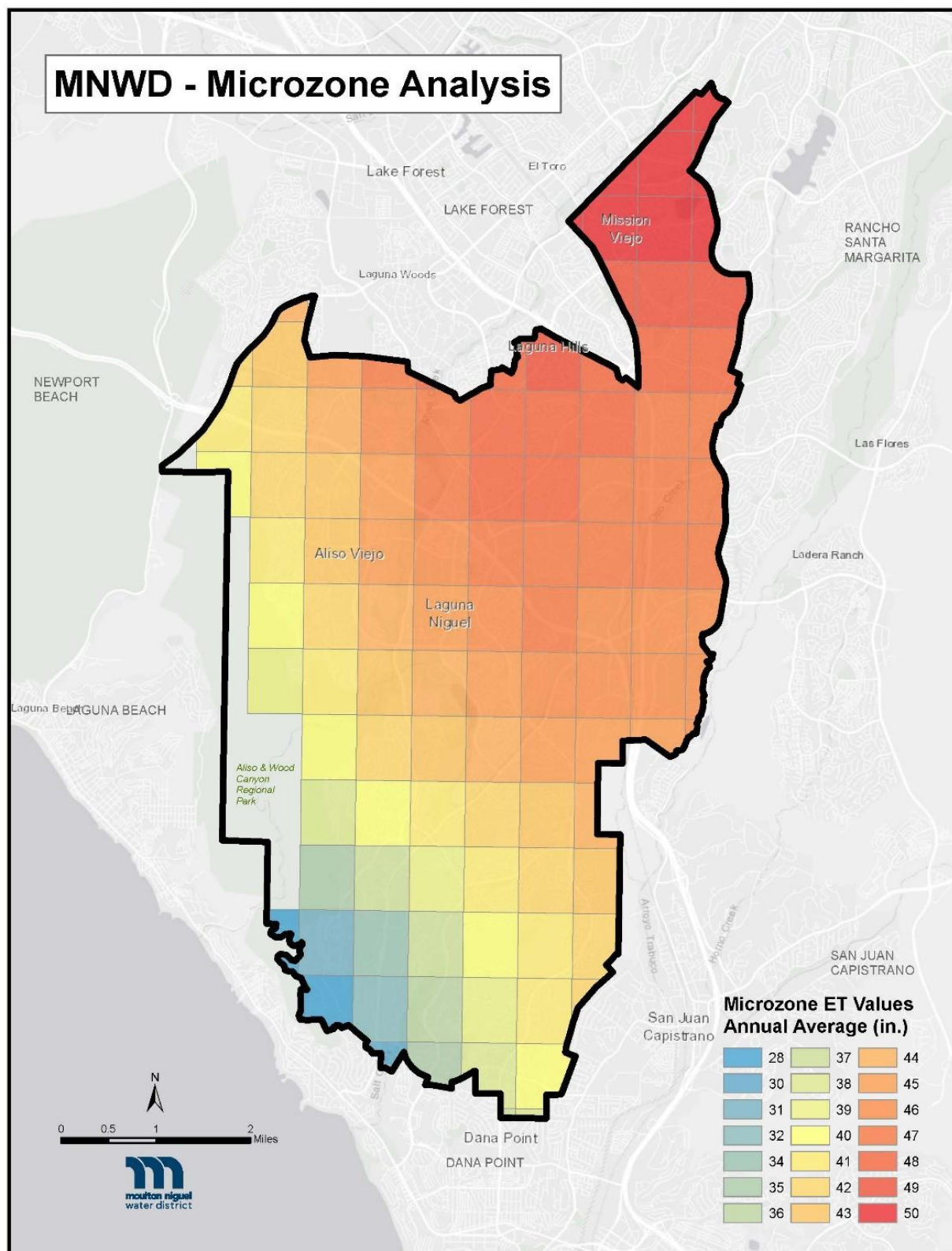


Figure 3- 2. MNWD Microzones

Land Use

Table 3-3 summarizes land uses within the service area. Residential land uses occupy 40 percent of the service area; 73 percent of the residential land use is single-family homes while remainder is composed of multi-family homes and mixed residential. Open space and parks comprise 41 percent of the service area, with most acreage concentrated in the Cities of Laguna Niguel and Aliso Viejo.

Commercial, Industrial, and Institutional (CII) land uses occupy 18 percent of the service area. CII land uses are present in all cities throughout the service area; however, the greatest concentration occurs in Mission Viejo. Miscellaneous land, including those with unknown use designation, occupy approximately 1 percent of the service area. As previously described, the service area is considered to be largely built out, and with expectations of future change limited to infill and redevelopment.

The anticipated future growth due to development is included in the District's demand projections and described further in **Section 4: Projected Water Use**. Data collected from cities include existing and planned land uses, development constraints apparent in existing land uses, zoning, current adopted general and community plans, and guidance on likely development patterns over the next 10 years (see **Appendix E**).

Table 3- 3. MNWD Land Use Summary

Land Use	Total Acres	Percent
Open Space and Recreation	9,171	41%
Open Space and Parks	3,729	41%
Wildlife Preserve	3,372	37%
Other Recreation	2,070	22%
Residential	8,989	40%
Single Family	6,582	73%
Multi-family	1,987	22%
Mixed Residential	421	5%
Commercial, Industrial, and Institutional	4,017	18%
Public, Regional, and Education Facilities	1,456	36%
Transportation, Mixed Use, and Other	1,214	30%
Retail Stores and Services	871	22%
General Office Use	476	12%
Other	315	1%
Total	22,492	100%

Demographic and Socioeconomic Factors

Table 3-4 identifies race, housing, education, economy, and income and poverty demographics in MNWD's service area.

Table 3- 4. Service Area Demographics (Race, Housing, Education, and Economics)

Demographics Category	Laguna Niguel	Aliso Viejo	Mission Viejo	Laguna Hills	Dana Point
Race and Ethnicity					
White	67.4%	58.1%	61.9%	55.3%	77.9%
Black or African American	1.1%	2.0%	1.1%	0.9%	1.8%
American Indian and Alaska Native	0.2%	0.2%	0.8%	0.5%	0.1%
Asian	11.3%	16.7%	14.5%	16.0%	3.0%
Native Hawaiian and Other Pacific Islander	0.1%	0.0%	0.3%	0.2%	0.0%
Two or More Races	12.8%	16.4%	15.7%	15.0%	11.7%
Hispanic or Latino	14.7%	19.2%	20.0%	23.0%	16.5%
White, not Hispanic or Latino	65.0%	54.6%	59.1%	52.8%	72.0%
Housing					
Owner-occupied housing unit rate, 2020-2024	67.4%	56.7%	76.9%	70.0%	62.4%
Median value of owner-occupied housing units, 2020-2024	\$1,190,900	\$917,900	\$1,009,600	\$1,012,300	\$1,320,300
Persons per household, 2020-2024	2.48	2.55	2.74	2.68	2.35
Education					
High school graduate or higher, percent of persons age 25 years+, 2020-2024	96.7%	96.0%	94.3%	94.7%	96.1%
Bachelor's degree or higher, percent of persons age 25 years+, 2020-2024	59.8%	57.6%	52.1%	54.7%	56.6%
Economy					
In civilian labor force, total, percent of population age 16 years+, 2020-2024	64.9%	73.8%	62.5%	67.0%	64.8%
Income & Poverty					
Median household income (in 2024 dollars), 2020-2024	\$140,452	\$142,439	\$136,123	\$128,851	\$141,520
Per capita income in past 12 months (in 2024 dollars), 2020-2024	\$77,395	\$67,538	\$61,910	\$67,213	\$84,639
Persons in poverty, percent	6.4%	5.1%	5.6%	7.8%	7.2%
Source: U.S. Census; Quick Facts: https://www.census.gov/quickfacts/fact/table/US/PST045225					
NOTE: The District serves the following city proportions, based on customer connections and service area overlay: Laguna Niguel (100%); Aliso Viejo (96%); Laguna Hills (72%); Mission Viejo (33%); Dana Point (9%); San Juan Capistrano (0%). Customer population in San Juan Capistrano is considered to be zero due to serving only 6 commercial connections; therefore, demographics are excluded here.					

3.3 Water Supply and Services

The District's current water needs are met by a combination of imported potable water and recycled water. The District's potable demands are supplied from imported sources via MWD and MWDOC. The recycled water supply is locally sourced and accounts for 21 percent of the overall water supply in the District for the past 5 years.

Imported Water

MNWD currently relies on imported water provided by MWD through MWDOC. Imported water represents 79 percent of MNWD's total water supply. MWD's water supply originates from two principal sources 1) the Colorado River via the Colorado River Aqueduct (CRA) and 2) the State Water Project (SWP) originating in the Feather River watershed, Lake Oroville in Northern California (see Section 6, Water Supply Characterization). Imported water delivered to MNWD is currently treated at MWD's Robert B. Diemer Water Treatment Plant (WTP) located north of Yorba Linda or at the Baker WTP located in Lake Forest. The Baker WTP was built to provide a redundant treatment facility in the event of a Diemer WTP outage. On average approximately 70 percent of the District's potable water supplies are treated at the Diemer WTP and the remaining 30 percent of potable water supplies are treated at the Baker WTP.

Imported Water Treatment Plants

The Diemer WTP is owned and operated by Metropolitan Water District of Southern California (MWD) with a treatment capacity of 520 million gallons per day (MGD). Typically, the Diemer WTP receives a blend of Colorado River water from Lake Mathews through the MWD Lower Feeder and SWP water through the Yorba Linda Feeder. Imported MWD water is conveyed to MNWD through two MWD-operated transmission mains; the EOCF #2, which delivers on average 20 percent of total potable water supplies and the Allen McColloch Pipeline (AMP), which delivers on average 80 percent of supplies. MNWD receives water from the EOCF #2 through the JTM and the Eastern Transmission Main (ETM). MNWD receives water from the AMP directly from two take-outs (OC-79 and OC-81) and indirectly from the South County Pipeline (SCP).

The Baker WTP is a 28.1 MGD drinking WTP that was a joint regional project commissioned by five South Orange County water districts (Baker Partners), including MNWD. MNWD owns 8.4 MGD of capacity in the Baker WTP, which is used to provide a reliable local drinking water supply in the case of emergencies or extended facility shutdowns on the MWD delivery system (such as a Diemer WTP outage). The Baker WTP also supports operational flexibility by creating redundancy within the water conveyance system. Untreated water is conveyed from the CRA to Baker WTP via the Baker Pipeline and once treated, to MNWD via the SCP. The Baker Pipeline is an untreated line that connects to the Santiago Lateral of MWD's Lower Feeder.

Water Conveyance, Storage, and Key Facilities

MNWD imports water using the JTM (a project agreement between MNWD and other water agencies); ETM jointly owned by MNWD and the Santa Margarita Water District ; and the SCP, which conveys water from the AMP to several south county water agencies. The key conveyance facilities and main pipelines used are as follows:

- **Joint Transmission Main:** The JTM conveys imported water from the EOCF #2 (operated by MWD) to South Orange County. The JTM is jointly owned by MNWD, IRWD, El Toro Water District (ETWD), Santa Margarita Water District, City of San Clemente, and SCWD. The JTM is operated under contract by the SCWD. MNWD primarily serves Aliso Viejo, Laguna Hills, Laguna Niguel, and Dana Point from the JTM.
- **Eastern Transmission Main:** The ETM begins as a branch off the JTM near Moulton Parkway and Laguna Hills Drive. MNWD owns 10 cubic feet per second (CFS) of capacity in the ETM, with the remaining capacity owned by Santa Margarita Water District (SMWD). The District is the operator of the ETM. MNWD primarily serves Laguna Hills, Laguna Niguel, Mission Viejo, and San Juan Capistrano from the ETM.
- **Allen McColloch Pipeline:** The AMP is a major water supply line constructed by MWDOC from the Diemer WTP to South Orange County. In 1995, MWD purchased the AMP from MWDOC and now operates the AMP. The AMP terminates in the northeast section of Mission Viejo at the ETWD R-6 Reservoir and conveys water primarily to Mission Viejo and Laguna Hills.
- **South County Pipeline:** The SCP conveys water from the AMP to SMWD, MNWD, SCWD, and City of San Clemente. MNWD obtains flow from SCP at MNWD's takeout (SC-2) and primarily serves Laguna Hills, Mission Viejo, Laguna Niguel, Dana Point, and Aliso Viejo via the Central Intertie Pipeline (CIP).

MNWD has worked to develop local water supply improvements to ensure that MNWD has at least 7 days' worth of storage and emergency interconnection supply to withstand a planned outage at major imported water facilities (such as Diemer WTP). MNWD maintains a water policy goal of planning for up to 60 days of emergency water, consistent with MWDOC and MWD recommendations. To support progress toward this target, MNWD's Water Reliability Policy (26-03) establishes ongoing supply and system reliability objectives, including evaluating cost-effective emergency water supplies of up to 15 cfs, assessing options to develop up to 10,000 AF of dry-year storage, and

considering direct potable reuse opportunities to provide up to 15 percent of local water supply. The water supply improvements contributing to these goals include:

- **Emergency Interconnection Service Agreement with Irvine Ranch Water District (IRWD) and Orange County Water District (OCWD):** This agreement allows for an emergency supply of up to approximately 7 MGD (10.9 CFS) of groundwater supplied by IRWD from the Orange County Basin. The agreement ends after 2030.
- **R-6 Storage with El Toro Water District:** MNWD has storage capacity of 13 million gallons (MG). The total reservoir capacity is 275 MG.
- **Upper Chiquita Reservoir with Santa Margarita Water District:** MNWD has storage capacity of 90 MG. The total reservoir capacity is 244 MG.
- **5B Reservoir with South Coast Water District:** MNWD has storage capacity of 700,000 gallons. The total reservoir capacity is 2 MG.

MNWD has 28 potable water and 11 recycled water operational storage reservoirs. The total potable water storage capacity within MNWD is 71 MG, and 19 MG for the recycled water system. In addition, MNWD operates and maintains approximately 655 miles of potable water distribution pipelines. MNWD also operates 25 potable pump stations to pump water from lower pressure zones to the higher-pressure zones and 16 potable water pressure reducing stations and flow control facilities to convey water from high to low zones. **Figure 3-3** shows the potable takeout structures, pump stations, and reservoirs.

Recycled Water Services

MNWD's water policy includes goals to promote the use of recycled water for conservation efforts, reuse initiatives, and to utilize this resource to the maximum extent possible under the laws of the State of California. This policy enables MNWD to substantially minimize the need to import water from other regions.

In 1974, the District became one of the first retailers in Orange County to deliver recycled water for irrigation use. The District now owns two Advanced Wastewater Treatment (AWT) facilities providing recycled water service. The District also maintains 140 miles of recycled mainline and operates 10 recycled pump stations to pump water from lower pressure zones to the higher-pressure zones, along with 13 recycled water pressure-reducing stations. In addition, the District owns 1,000 AF (326 MG) of capacity rights in the Upper Oso recycled water reservoir, managed by SMWD. **Figure 3-4** shows the recycled water transmission mains, pump stations, and reservoirs.

Wastewater Services

The District maintains 500 miles of wastewater collection pipelines. The District's wastewater system currently has 17 active lift stations that pump wastewater over the ridge lines to the various treatment plants for treatment and recycling. The District owns and operates wastewater treatment Plant 3A and the Regional Treatment Plant. These wastewater facilities are further described in **Section 6: Water Supply**. The wastewater trunk lines, lift stations and treatment plants are shown in **Figure 3-5**.

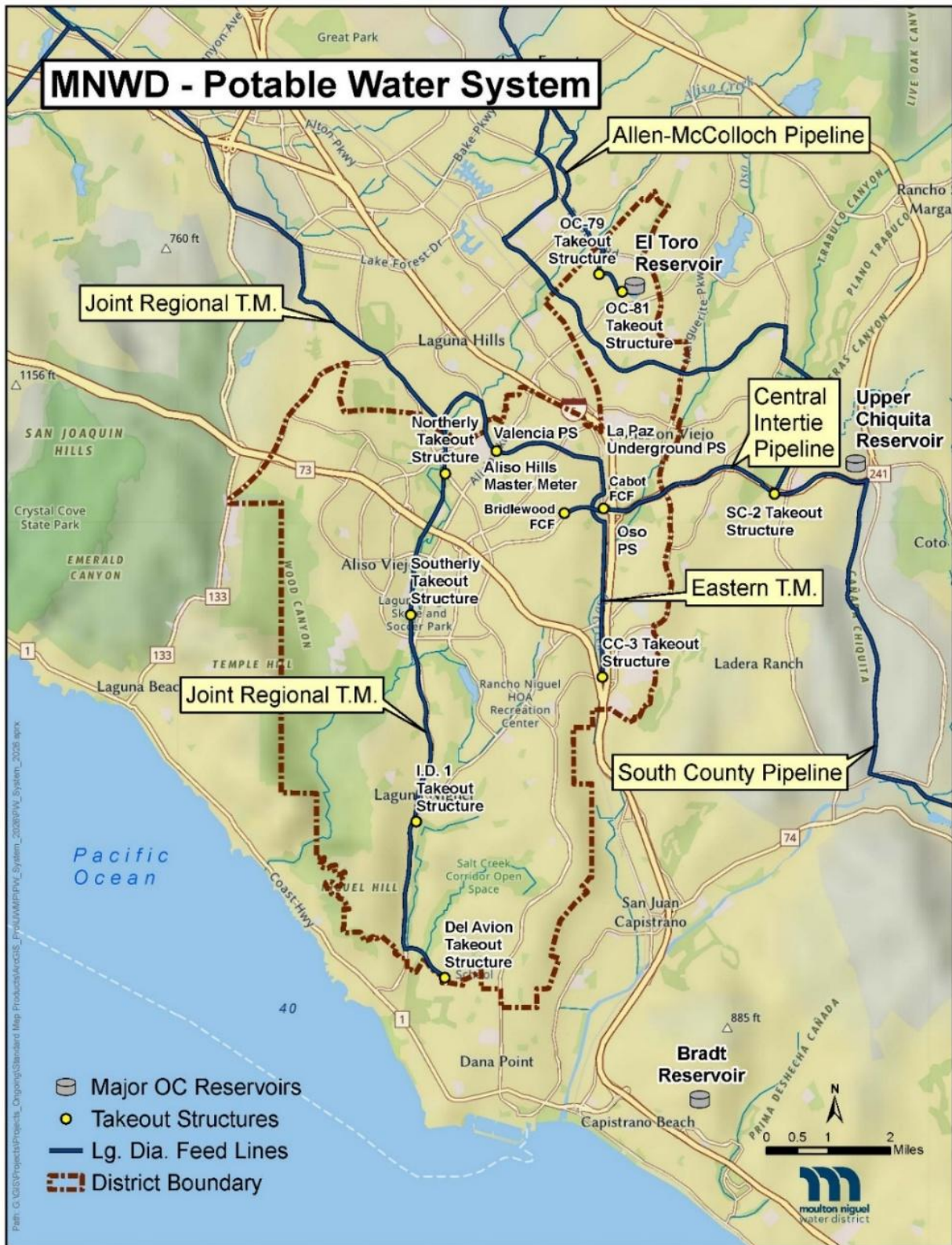


Figure 3- 3. Potable Water System

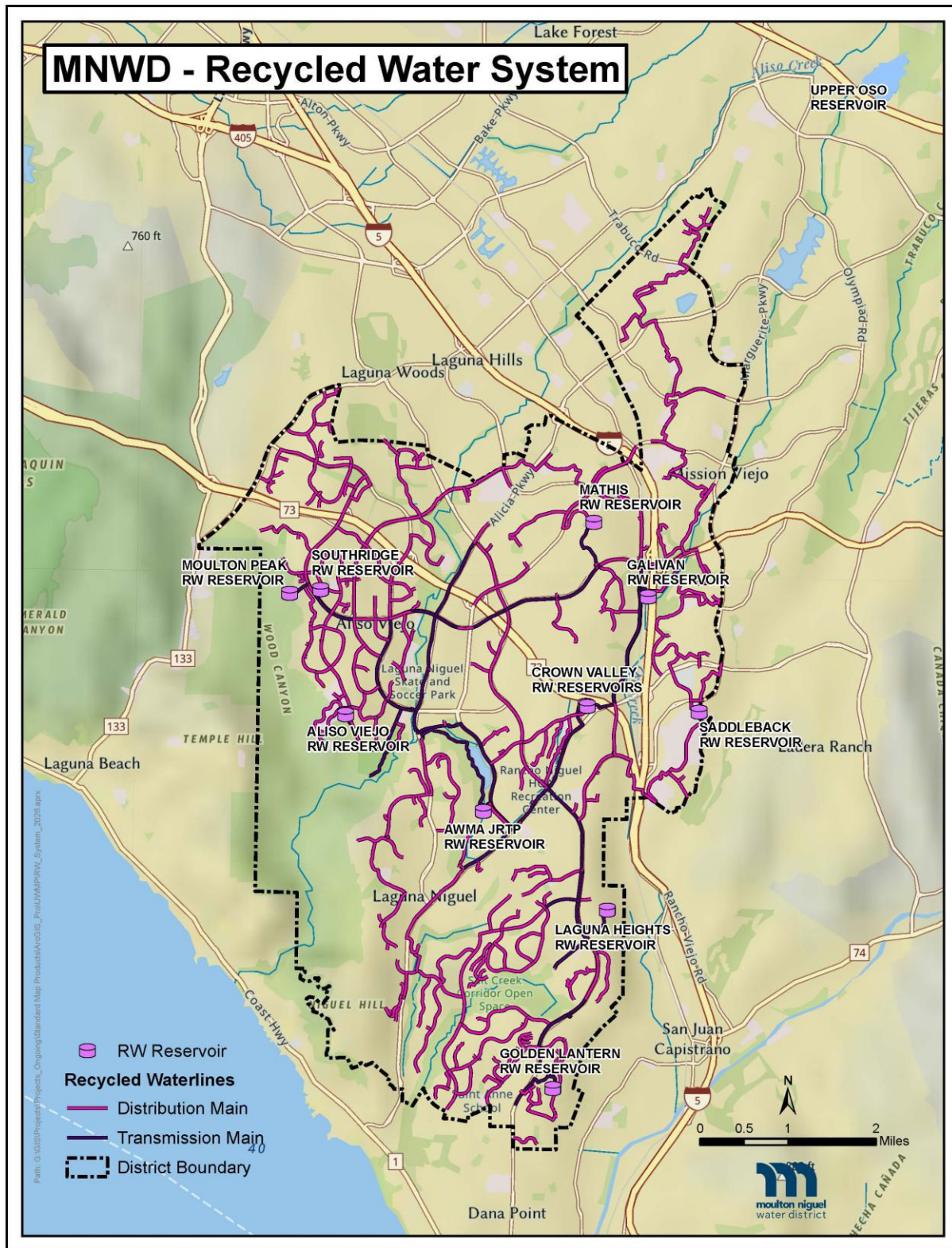


Figure 3- 4. Recycled Water System

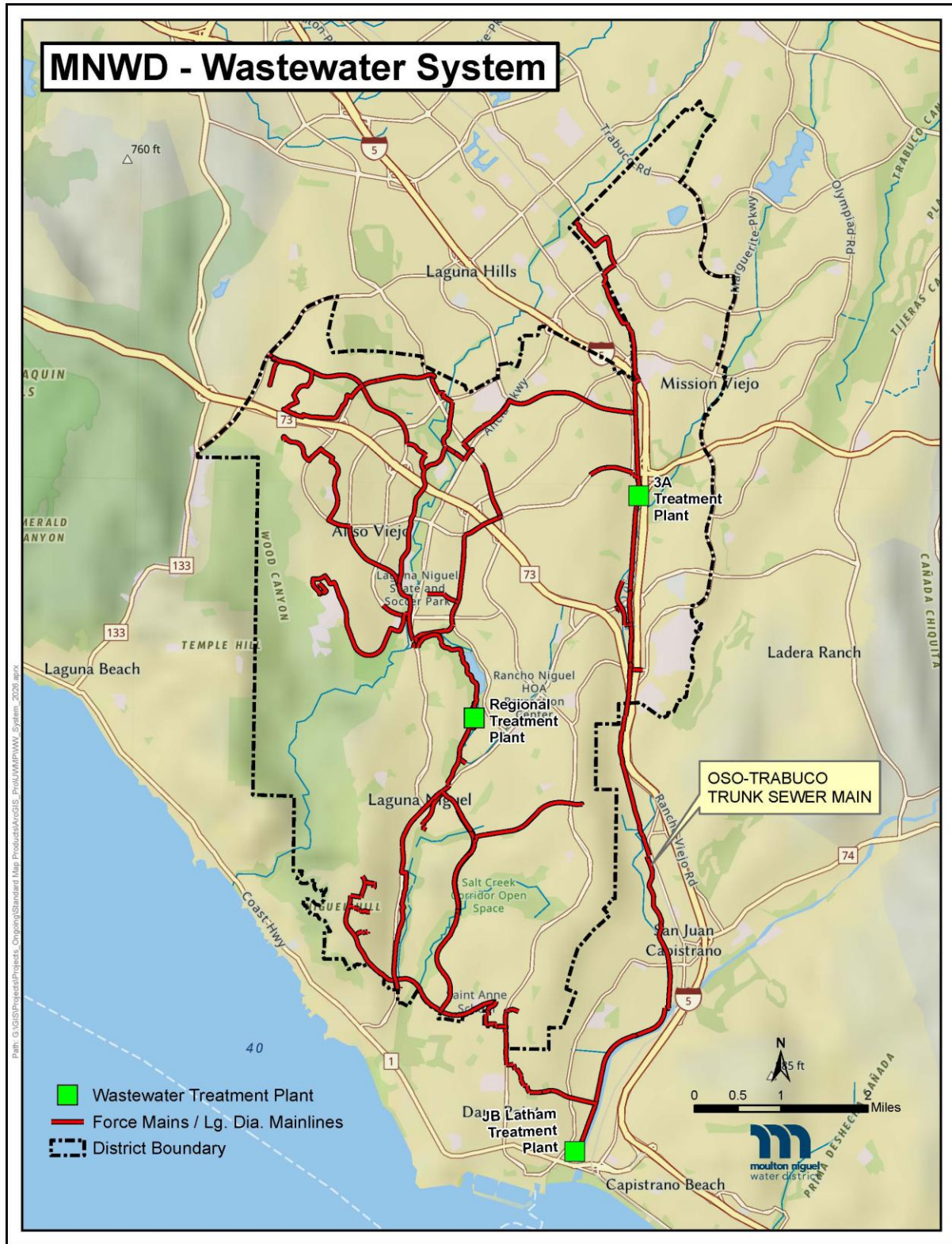
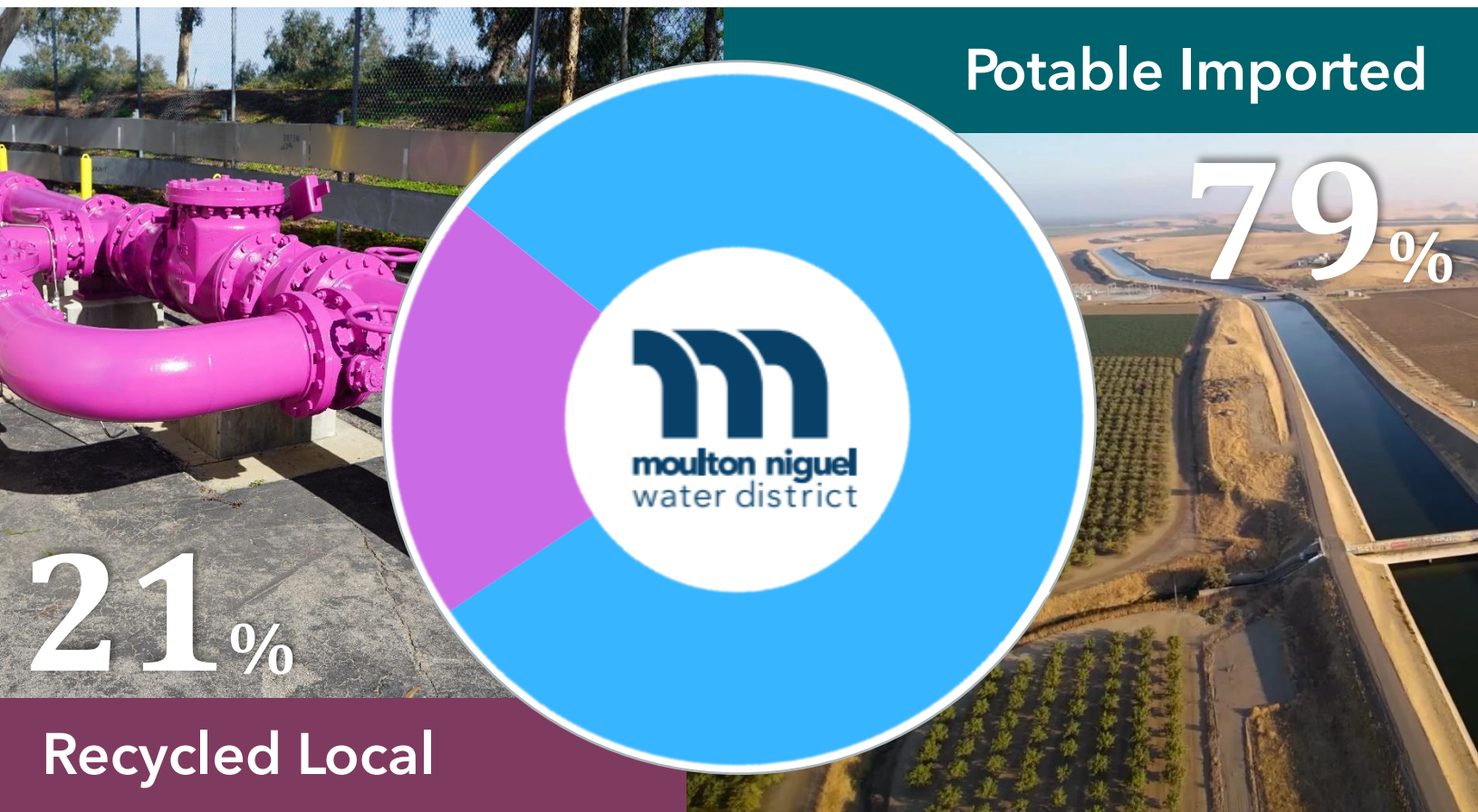


Figure 3- 5. Wastewater System

Section 4: Water Use Characterization

4.1 Defined Water Use Sectors

MNWD's current water use demands are met by a combination of imported potable water and locally produced recycled water. Recycled water use accounts for approximately 21 percent of the overall water demand in the District. The District's potable water supply is entirely imported water from MWD, purchased from MWDOC. MWD's two main sources of imported water come from the Colorado River and the Sacramento San Joaquin Delta (Delta), further described in **Section 6: Water Supply Characterization**.



4.2 Past, Current, and Projected Water Use by Sector

The District quantifies water use under five main billing categories including 1) single-family residential, 2) multi-family residential, 3) commercial, (commercial, industrial, and institutional), 4) potable irrigation, 5) recycled irrigation, as well as uses categorized as “other” defined below under **Current Water Use**.

Historical Water Use

Since 2005, the total water use (imported potable and recycled) demands have declined even with increasing population, **Figure 4-1**. District customers have collectively reduced total water use by nearly 15,000 AF over the past 20 years. Weather, drought, increased cost of imported water, and economic conditions play a role in the year-to-year demand fluctuations, however, the overall decline in imported potable water can largely be attributed to active demand management, water efficiency programs, and increased use of recycled water for irrigation. MNWD customers have responded to changing water supply conditions. The District's use of recycled water for irrigation has offset average imported potable demands by approximately 6,800 AFY on average over the past 20 years.

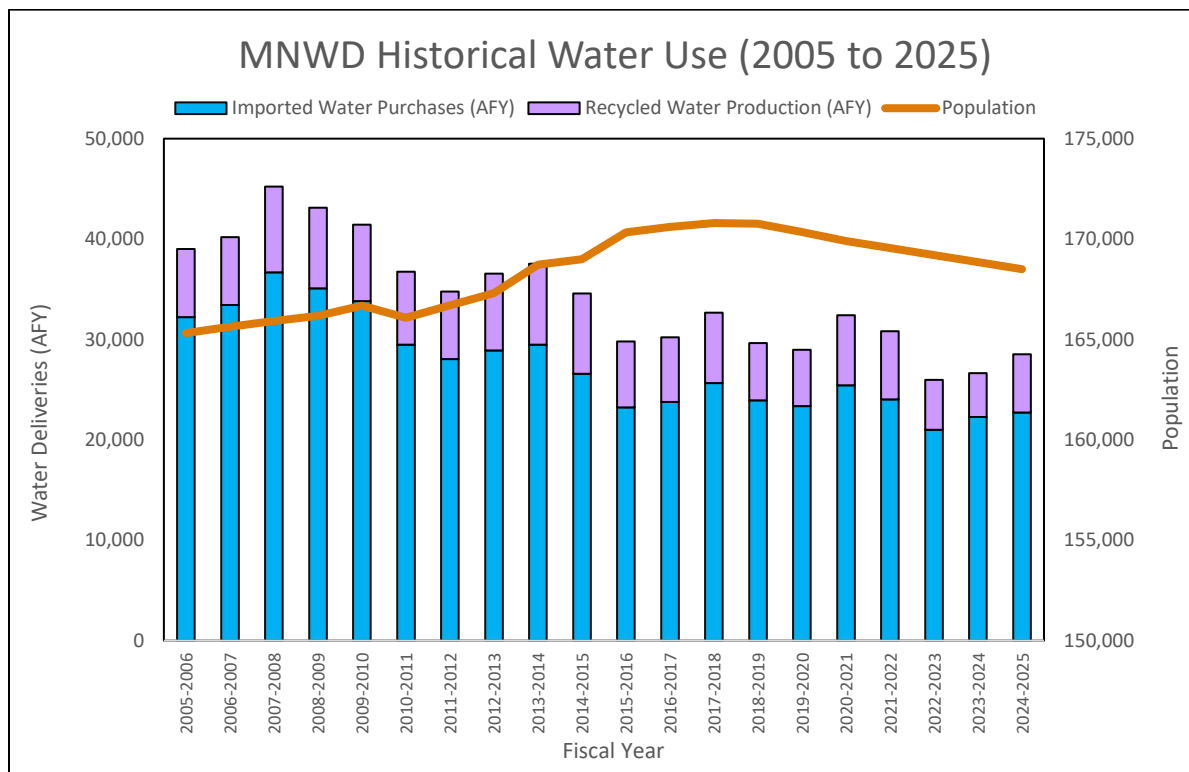


Figure 4- 1. Historical MNWD Water Use

Current Water Use

Actual 2025 MNWD customer demands for potable and non-potable (recycled) water including water losses are found in **Table 4-1, Figure 4-2**.

Table 4- 1. DWR Submittal Table 4-1, 2025 Retail Water Use

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable	Volume (AF)
Single Family		Potable	13,365
Multi-Family		Potable	2,571
Commercial	Commercial and Institutional	Potable	2,182
Landscape		Potable	2,848
Distribution System Water Loss		Potable	1263
Other (optional)	Potable Hydrant	Potable	7
Subtotal Potable			22,236
Subtotal Non-Potable			0
Total			22,236
NOTES: The District does not have industrial water use in the service area. Institutional water use is not tracked separately from commercial water use. Units are in AFY for FY 2024-2025.			

The District does not currently use or project to use water for sale to other agencies, saline water intrusion (barrier water), groundwater recharge, conjunctive use, or agricultural. However, the District does participate in water wheeling with El Toro Water District (ETWD), as needed. Occasionally, water intended for use by ETWD is moved through the District's distribution system temporarily before reaching the respective agencies' service area. This water is metered and accounted for as wheeled water rather than a direct sale. This water is excluded from UWMP projections as it is not used within the District's service area.

WATER USE BY SECTOR

Single Family Residential Multi Family Residential Potable Irrigation
Recycled Irrigation Commercial

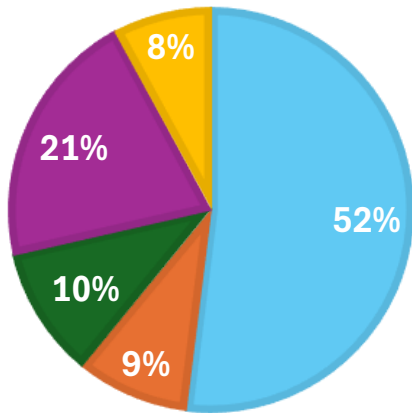


Figure 4- 2. FY 24-2025 Water Use

Single-Family Residential: Single-family homes and townhomes with individual meters.

Multi-Family Residential: Apartments, condominiums, and townhomes with master meters for the entire building or complex.

Commercial: Businesses, schools, hospitals, and governmental customers.

Potable Irrigation: Large landscape users with dedicated irrigation meters such as golf courses, common residential landscaping (e.g., HOAs), parks, medians, and greenbelts.

Recycled Irrigation: All recycled water users including golf courses, parks, and large residential common landscaping areas.

Other: Water sold through potable hydrants such as temporary construction users.

Projected Water Use

Projected water usage within the MNWD service area, presented in five-year increments, is shown in **Table 4-2** and **Figure 4-3**. To estimate the impacts of major factors that influence water demands, a multivariate statistical forecasting model was developed to produce demand forecasts through 2055.

As the District is considered to be “built-out,” new development is primarily related to infill and denser utilization of land. These new infill and increased density projects will replace vacant, low density commercial and residential areas. In close collaboration with the cities within the District and reflecting each of their General Plan Land Use Elements, the private development team at the District develops a projection of new development based on planned projects to develop FY 2025-2035 projections; these include some single-family residential units with most of the development being multi-family residential units. The specific projects are included in **Appendix E** and are all included in the demand projections for the 2025 UWMP.

Table 4- 2. DWR Submittal Table 4-2, Projected Retail Water Uses

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)							
Use Type	Additional Description	Projected Water Use (Report To the Extent that Records are Available)					
May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Single Family		Potable	15,108	14,564	14,216	13,814	13,412
Multi-Family		Potable	2,629	2,535	2,474	2,404	2,334
Commercial	Commercial and Institutional	Potable	2,283	2,201	2,149	2,088	2,027
Landscape		Potable	3,022	2,913	2,843	2,763	2,682
Other (optional)	Potable Hydrant	Potable	24	22	22	21	22
Subtotal Potable			23,066	22,235	21,704	21,090	20,477
Subtotal Non-Potable			0	0	0	0	0
Total			23,066	22,235	21,704	21,090	20,477
NOTES: Projections reflect the latest population count from CDR as well as known new development projects provided by city staff.							

Figure 4-3 shows the range of projections with the upper and lower bound 2025 projected water demands for all water use sectors (including recycled water) through 2055. As shown, actual water use has been lower than previously projected water use, which reflects an overall decreasing demand trend. While partially driven by State-mandated emergency usage reductions implemented in 2015, the difference between projected and actual usage also reflects evolving attitudes toward water use after the recent historic multi-year drought in California. As such, the methodology for projecting future water use accounts for this continuing approach to Statewide, regional, and local demand management.

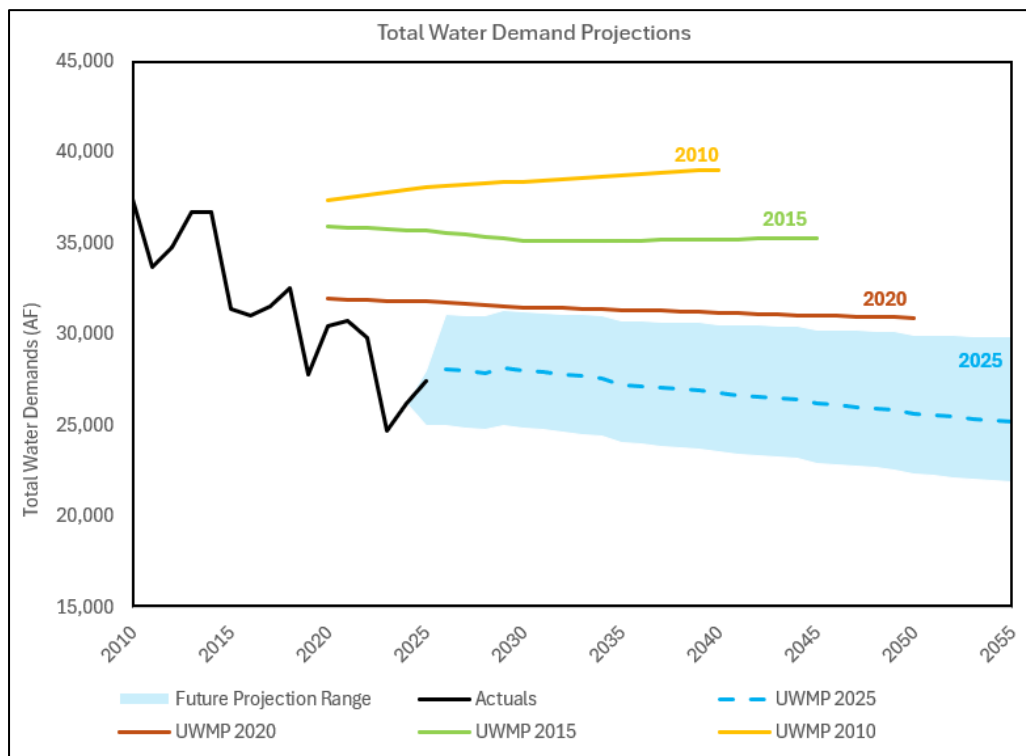


Figure 4- 3. Comparison of UWMP Projections (2010-2025)

Projected water demands were developed using historical water usage, demographics, socioeconomics, water use efficiency factors, ongoing water use efficiency efforts, and weather. The demand forecast, projected through the year 2055, provides a basis on which to evaluate the ability of MNWD’s water supply and infrastructure capacity to meet existing and future water demands. Water use efficiency is a voluntary choice by customers, which is incentivized through programming and access to rebates.

4.3 Estimated Future Water Savings

The CWC states that a water supplier must indicate in its 2025 UWMP when its forecasts reflect future water savings from codes, standards, ordinances or transportation and land-use plans in projections. MNWD’s water use projections do account for future water savings as estimated from codes, standards, or ordinances into projection modeling. MNWD’s estimated future water savings and water demand modeling specifically reflects the following:

- MNWD’s Ordinance 21-05 (to be replaced by 26-XX): Ordinance adopting the Water Shortage Contingency Plan and prescribing water conservation rules and regulations. See **Appendix C** for complete list of conservation rules and regulations.
- MNWD’s Rules and Regulations

- Land Use Plans from cities of Laguna Niguel, Aliso Viejo, Mission Viejo, Laguna Hills, and Dana Point. (Note that customers from San Juan Capistrano are commercial only and that city land use plans have been referenced in previous modeling iterations, and may not be directly incorporated in the latest modeling.) Specifically, for the 2025 UWMP, 18 new development projects were incorporated into the modeling as described in **Appendix E**.
- California Code of Regulations, Title 23, Division 3, Chapter 3.5: Urban Water Use Efficiency and Conservation: MNWD water demand forecasts includes scenarios for the Urban Water Use Objective for indoor and outdoor gallons per capita per day (MNWD LRWRP, 2025).

These estimated water savings and water demand projections are also periodically recalibrated to incorporate the effect of water savings experienced through MNWD's water efficiency programs and the latest actual demands (**Table 4-3**).

Table 4- 3. DWR Submittal Table 4-3, Water Use Projections Model Inclusion

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections?	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: Estimated Future Water Savings, Section 7: Water Service Reliability and Drought Risk Assessment, Section 8: Water Shortage Contingency Plan
Are Lower Income Residential Demands Included In Projections?	Yes
NOTES: All residential areas are included in the demand projections. Water savings are incorporated in assumptions for on-going water conservation programs (e.g., turf conversion).	

As part of the 2025 UWMP, retail water suppliers are also required to develop water use projections for low-income households at the single-family and multi-family levels (**Table 4-3**). Consistent with this State requirement, a low-income household is defined as a household earning below 80 percent of the County of Orange's median income, adjusted for family size. Additional information is provided in the following **Section 4.4**.

4.4 Water Use of Lower Income Households

Using available data from local cities, low-income housing projections within the District were determined using information contained in the Regional Housing Needs Assessment (RHNA). Developed by the local council of governments (COG) in coordination with the

California Department of Housing and Community Development, the RHNA process quantifies the need for housing by income group within each jurisdiction during specific planning periods and is used in Housing Element and General Plan updates. COGs are required by the State Housing Law to determine the existing and projected regional housing needs for people at all income levels. The RHNA's goals are to prioritize local resource allocation and to help decide how to address existing and future housing needs. The projected change in water demands for low-income households in the MNWD service area was estimated by calculating the percentage of projected low-income units in the service area as a percentage of the total projected units from the Final 6th Cycle RHNA.

4.5 Distribution System Water Losses

The American Water Works Association (AWWA) M36 Water Audits and Loss Control Program Guidebook defines distribution system water losses as the difference between system input volumes and authorized consumption, consisting of both apparent and real losses. Apparent losses are comprised of unauthorized connections and metering inaccuracies. Whereas real losses result from water lost at leaks in service and main lines. Distribution system losses are determined using the AWWA Free Water Audit Software worksheet. **Table 4-4** contains the results for the last five years of water loss auditing.

Table 4- 4. DWR Submittal Table 4-5, Water Loss Audit Reporting

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available.		
CA 3010073	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
NOTES: Submitted using AWWA process for water loss audit reporting. These audits can be accessed at the following: https://wuedata.water.ca.gov/awwa_plans		

Non-revenue water consists of three components: unbilled authorized consumption (e.g., hydrant flushing, and firefighting), real losses (e.g., leakage in mains and service lines), and apparent losses (unauthorized consumption and metering inaccuracies). Real losses represent the volume of physical water lost from the distribution system, consisting of all types of leaks, breaks, and overflows. The volume of real losses is determined by subtracting the total apparent losses from the total water losses volume.

Water Code Section 10608.34 requires the State Water Resources Control Board (SWRCB) to adopt rules requiring urban retail water suppliers to meet performance standards for the volume of water losses. Each urban retail water supplier, including the District, will be required to comply, by 2028, with an individualized volumetric water loss standard based on real loss. The SWRCB adopted the formula for determining water loss performance standards in 2023 and, in January 2026, released individual water loss performance standards for urban retail water suppliers.

The District developed a Proactive Leak Detection team to provide leak detection surveys of the District's potable distribution system. This Leak Detection team uses remote data collection tools to track leak detection survey routes and maximize the recovery of water lost in mainlines, laterals, and service lines. Additionally, District staff utilize the Advanced Metering Infrastructure (AMI) network, maintenance management systems, SCADA data, and GIS database to develop a zonal water loss dashboard to provide insight into locations in the service area with greater water loss and use this information to inform leak detection survey routes. Additional information related to water loss is detailed in **Section 9**.

In addition, as stated in CWC 10631(d)(3)(C), data shall be included in the UWMP to show whether the urban retail water supplier met the distribution loss standards enacted by the board pursuant to Section 10608.34. MNWD does meet the loss standards enacted by the State Water Board as indicated in **Table 4-5** and **Table 4-6**.

Table 4- 5. DWR Submittal Table 4-6, Real Water Loss

Submittal Table 4-6 (A) Retail: Progress Towards 2028 Water Loss Standard Water Code Section 10631(d)(3)(C)						
Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n)	Real Water Loss				Real Water Loss Per Unit per Day
		State Water Board Standard		Most Recent AWWA Water Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss	Number of Units (Connections)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)	
CA 3010073	Yes	26.5	Gallons per Service Connection per Day (GPSCD)	54,089	1,037	17.1
<u>Water Board's Calculated Water Loss Standards</u>						

Table 4- 6. DWR Submittal Table 4-6, Apparent Water Loss

Submittal Table 4-6 (B) Retail: Progress Towards 2028 Water Loss Standard Water Code Section 10631(d)(3)(C)					
Public Water System ID # Reported in Submittal Table 2-1 R	Apparent Water Loss				
	State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	
CA 3010073	5.3	Gallons per Service Connection per Day (GPSCD)	54,089	226	3.7

4. 6 Potential Hydrologic Variability Effects

California has experienced significant droughts over the last century. Including some of the most notable historical drought periods such as 2020-2022, 2012-2015, 2007-09, 1987-92, 1976-77, and off-and-on dry conditions spanning more than a decade in the 1920s and 1930s. Climate variability is a challenge for Southern California water supplies due to increasing volatility in long-term local temperature and precipitation patterns. As demonstrated in the District's 2025 Long-Range Water Reliability Plan (LRWRP) consideration of potential climate variability impacts on local water demands is essential when developing a long-term forecast (MNWD, 2026).

The District relies on imported water. Climate variability is an uncertainty that MNWD considers in ensuring that current and future water demands for our community are met. Warmer temperatures in Southern California will affect water demands by increasing the outdoor water requirements for plant life and landscapes. As average temperatures increase, outdoor irrigation water use is also expected to increase due to increased evapotranspiration rates.

The District continues to invest in and promote our outdoor rebate programs which are offered for transforming landscapes into low water use plants and for irrigation efficient devices, which are described further in **Section 9**. Since 2011, the District has incentivized the removal of more than 6.95 million square feet of turf through its residential and

commercial programs. The District continues to see ongoing participating in these programs and will continue to prioritize outreach efforts to reduce outdoor demand.

The Water Resilience Portfolio states that California's climate is warming and becoming even more variable, which reduces winter snowpack, intensifies drought and wildfire, and drives more intense storms that worsen flooding (California Natural Resources Agency, et. al, 2020). Warmer temperatures cause higher evaporation rates, particularly during the hot summer and early fall months, contributing to reduced stream flows, drier soils, reduced groundwater infiltration, higher losses of water from surface reservoirs, increased urban and agricultural demand for irrigation water, and more water needed for ecosystem protection (Delta Stewardship Council, 2018).

Historical hydrological patterns can no longer serve water managers as a trustworthy guide for long-term planning, as climate science and projections become increasingly important (California Natural Resources Agency, et. al, 2020). While the extent to which the climate changes in Southern California are uncertain, the impacts to water demands, and availability of water supplies are clear. Additional details regarding specific impacts of climate variability on demand and supply can be found in **Section 7: Water Supply Reliability Assessment**.

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Section 5: SB X7-7 Baselines, Targets and 2020 Compliance

The California Water Conservation Act of 2009, also known as Senate Bill X7-7 (SB X7-7), requires water agencies to reduce per capita water use by 20 percent by the year 2020 (20x2020). Section 5 demonstrates that the District has complied with the requirements of SB X7-7 by the 2020 deadline. In 2010, the District was required to develop a baseline per capita water use and set a per capita water use target for 2015 and 2020. For the 2020 UWMP, the District previously demonstrated compliance with the 2020 water use target.

DWR also requires agencies to submit SB X7-7 Compliance Forms, a set of standardized tables to demonstrate compliance with the Water Conservation Act. The SB X7-7 worksheets are prepared and submitted to DWR as part of the UWMP process. The District population served, water supplied, and calculated per capita consumption for each of the selected years are documented. The unit gallons per capita per day (GPCD) is used in this section in accordance with the calculations required by SB X7-7. The GPCD is calculated by dividing total District water production by population.

5.1 Established Baselines and Targets

Water suppliers were required to establish baseline water use for two baseline periods, the 10- to 15-year baseline (baseline GPCD) and the 5-year baseline (target confirmation). In the 2015 UWMP, the District determined baseline water use during a baseline period and identified water use targets for the years 2015 and 2020 to meet the state's water reduction goal. This section describes the base period ranges used to establish the baseline GPCD and target confirmation.

The baseline water use is calculated as a continuous 10-year average during a period, which ends no earlier than December 31, 2004, and no later than December 31, 2010. Water suppliers whose recycled water made up 10 percent or more of their 2008 retail water delivery can use up to a 15- year average for the calculation. Recycled water use was at least 10 percent of the District's total deliveries in 2008; therefore, a 15-year baseline was used.

The baseline daily per capita consumption for the 15-year period was 216 GPCD, resulting in a 173 GPCD 2020 target. The baseline daily per capita consumption for the 5-year period was 189. Ninety-five (95) percent of the 5-year base was 179 GPCD. The 179 GPCD is higher than the 2020 target for the District of 173 GPCD, thus the District 20 percent reduction from the 15-year baseline was greater than a 5 percent reduction per capita over the 5-year period.

5.2 Target Methodology

DWR provided four different methods to establish water conservation targets, where each retail urban water supplier may elect in its sole discretion what method to use: (1) 20% Reduction, (2) Efficiency Standards, (3) Hydrologic Region, and (4) Savings by Sector. These technical methods give water suppliers flexibility in establishing per capita water use targets. The District selected Method 1 to establish its 2020 per capita water use target.

Under Method 1, MNWD committed to a 20 Percent Reduction in overall GPCD. The 2020 water conservation target for this method is defined as a 20 percent reduction of average per capita demand during the 15-year baseline period. This equates to a 2020 target of 173 GPCD for MNWD. **Figure 5-1** indicates the District's calculated GPCD from 2005 to 2025.

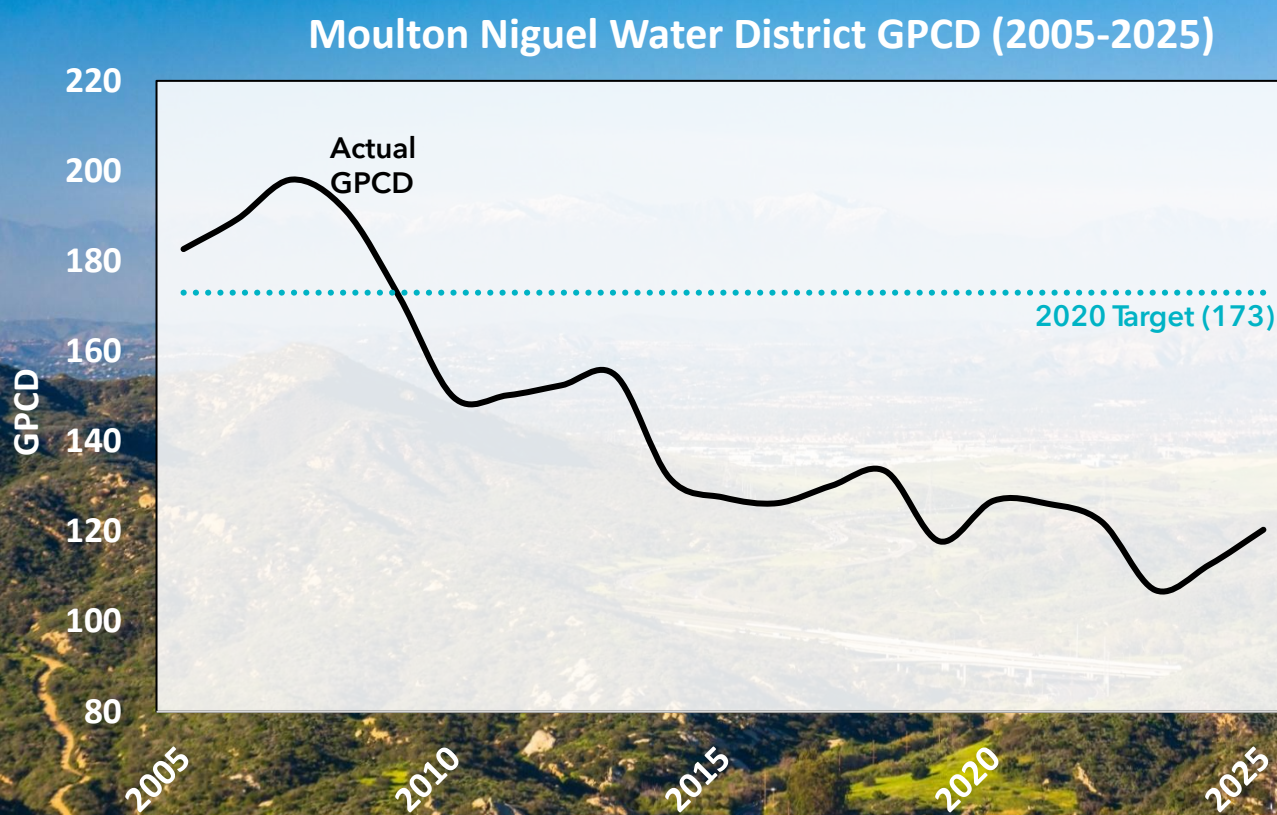


Figure 5- 1. MNWD Historical GPCD (2005 to 2025)

5.3 2020 Compliance

Under SB X7-7, individual agency targets were established to meet the goal of a statewide 20 percent reduction in per capita use by 2020. The 2020 target was calculated in the 2015

UWMP and was not changed in the 2020 UWMP. A 10 percent reduction target required in 2015 was 194 GPCD. A 20 percent reduction target in 2020 was 173 GPCD.

In conformance with SB X7-7, the District exceeded the 2015 interim target and 2020 target by achieving 140 GPCD in 2015 and 121 GPCD in 2020, **Table 5-1**. The District has continued to be a leader in water use efficiency since the last UWMP in targeting conservation efforts to meet its per capita target. As a result of these continued efforts, the District was well below the 2020 individual target of 173 GPCD, **Figure 5-1**. The District's 2025 values is 118 GPCD, still well below the 2020 compliance target.

Table 5- 1. DWR Submittal Table 5-1, SB X7-7 Compliance

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40				
☐	Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.			
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target?	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?
No	Individual Target	173	121	Yes
NOTES: Values are presented in gallons per capita per day (GPCD).				

5.4 Regional Alliance

As a retail agency, MNWD had the option of complying individually or participating in a Regional Alliance. **Table 5-1** reports on MNWD's individual targets. MNWD chose to also participate in a Regional Alliance with MWD OC in collaboration with all its retail agencies as well as the Cities of Anaheim, Fullerton, and Santa Ana. MWD OC created the Orange County 20x2020 Regional Alliance, which allows all of Orange County to benefit from regional investments, such as the groundwater replenishment system (GWRS), recycled water, and water efficiency programs.

Each agency within the MWD OC Regional Alliance calculates its own individual target. If the region had not complied with the regional target, an agency may still demonstrate compliance by meeting the individual target. Information on the Regional Alliance target calculations and compliance is contained within MWD OC's 2020 UWMP and 2025 UWMP. The 2020 actual GPCD achieved by the regional alliance was 109 GPCD, as compared to the regional target of 159 GPCD.

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Section 6: Water Supply Characterization

6.1 Purchased or Imported Water

As of 2025, the District's potable water supply is comprised entirely of imported water. Water supplies are purchased from wholesaler MWDOC. MWDOC in turn receives this imported water from MWD. MWD's two main sources of imported water come from the State Water Project (SWP) and Colorado River Aqueduct (CRA). Over the last decade, on average, MNWD has received approximately 78 percent of imported supplies from the CRA and 22 percent from the SWP. These imported water ratios vary throughout the year based on hydrologic conditions. The existing imported water supply system serving Orange County is detailed in **Section 3**.

The District coordinates with MWDOC to receive imported (potable) water from MWD via the regional distribution system located in Orange County. Pipeline capacity rights do not guarantee the availability of water; however, they do guarantee the ability to convey water when it is available. The District's distribution system operates in tandem with neighboring water districts and MWDOC member agencies to receive supplemental water to ensure water supply reliability, and physical capacity in the delivery system. All imported water supplies discussed in this UWMP are available to MNWD from existing infrastructure.

The Agreement for Sale and Purchase of the AMP (Metropolitan Agreement No. 4623) among MWD, MWDOC, MWDOC Water Facilities Corporation, and certain other identified participants, including MNWD, dated July 1, 1994 (AMP Sale Agreement) requires MWD to meet MNWD's requests for water deliveries, subject to the availability of water from MWD. The AMP Sale Agreement further requires MWD to augment or increase capacity necessary to meet MNWD's projected service area water demands.

MWD maintains a significant network of conveyance and distribution facilities to store and deliver SWP and CRA supplies. The Diemer Plant began operation in 1963. Diemer is situated on a hilltop in Yorba Linda, north Orange County, and treats water from both the SWP and the CRA before distributing it via gravity-flow to areas of Los Angeles and Orange counties. The facility has a treatment capacity of 520 million gallons a day (MGD). MNWD receives the majority of imported water from the Diemer Plant via Orange County feeders. In addition, MWD water stored in Lake Mathews is purchased and treated at the Baker Water Treatment Plant (Baker WTP).

State Water Project

The SWP originates in northern California from the Sacramento San Joaquin River Delta (Delta), an expansive inland estuary that serves as an integral part of California's water

system. The Delta receives runoff flows from the Sacramento, San Joaquin, Mokelumne, Cosumnes, and Calaveras rivers. The Delta also provides habitat for many species of fish, birds, mammals, plants; as well as supports agricultural and recreational activities. The SWP system that brings water from northern California to the District relies on a viable Delta for its water supply.

SWP reliability is impacted by changing environmental and regulatory conditions. The SWP source water comes from the Sierra Nevada Mountains. Melted snowpack makes its way through rivers and streams that converge in the Delta, where pumps move the water south to meet demands of water users. Prolonged droughts can significantly reduce exports from the Delta. Major seismic activities in the Delta area could result in long term pumping reductions by reducing SWP supplies for MWD. Channels in the Delta are constrained by an earthen levee system designed to protect below sea level islands from flooding. Over time, land subsidence has occurred; further increasing the risk of levee failure and island flooding. With a large earthquake, that impacts Delta levee operations, water exports could be disrupted for an extended period.

Since 2007, a series of plans and biological opinions have been released along with additional regulations that includes: Long-Term Operations Criteria Plan (2010), Long Term Operations Opinions (2012), Biological Opinions (2013, 2019, and 2024), among others. In 2020, California Department of Fish and Wildlife (CDFW) issued DWR a California Endangered Species Act (CESA) incidental take permit (ITP) for the long-term operation of the SWP in the Delta for the protection of Delta smelt, longfin smelt, spring-run Chinook salmon, and winter-run Chinook salmon. A new ITP was issued in November 2024, with additional tools and resources to better manage water supply. The latest ITP was issued independent of federal government and is stated to include additional technology to track real-time fish counts for operational adjustments as well as allow for greater flexibility.

In MWD's 2025 UWMP a "Rationale for Expected (SWP) Supply" is provided as follows:

Metropolitan and 28 other public entities have contracts with the State of California for SWP water. These contracts require the state, through DWR, to use reasonable efforts to develop and maintain the SWP supply. SWP contractors have the right to participate in the system, with an entitlement to water service from the SWP and the right to use the portion of the SWP conveyance system necessary to deliver water to them. The state has made significant investment in infrastructure. It has constructed 28 dams and reservoirs, 26 pumping and generation plants, and about 660 miles of aqueducts. More than 27 million California residents benefit from SWP water. DWR estimates that with current facilities and regulatory requirements, the project will deliver approximately 2.2

MAF under average hydrology considering regulatory requirements from the 2019 Biological Opinions and the Incidental Take Permit (2020 and 2024).

For additional information on the SWP and MNWD's imported water reliability under normal, single dry, and multiple dry years, please refer to **Section 7** of this UWMP.

Colorado River Aqueduct

The CRA is a 242-mile system comprised of open canals, tunnels and siphons that carry millions of gallons of water a day to the people of Southern California. The system works by pumping water up to higher elevations at five different points along the aqueduct and then allowing it to flow downhill by gravity.

Approximately 1,400 miles long and flowing through seven U.S. States and into Mexico, the Colorado River drains roughly one-twelfth of the land area of the contiguous United States. The Colorado River Basin is divided into the Upper and Lower Basins in northern Arizona. The Upper Basin spans portions of Wyoming, Colorado, New Mexico, Utah, and northern Arizona. The Lower Basin covers parts of Nevada, Arizona, California, southwestern Utah, and western New Mexico. The Colorado River also supplies water to parts of the states of Baja California and Sonora in northwestern Mexico (**Figure 6-1**). Since most of the Basin's water supply comes from the Upper Basin, drought conditions in the Upper Basin impact water supply and resources in both the Upper and Lower Basins of the Colorado River. The river is managed and operated under numerous contracts, agreements, and federal laws collectively known as the "Law of the River."

Since 2000, the Colorado River Basin (Basin) has experienced a historic, extended drought that impacts regional water supply and other resources, such as hydropower, recreation, and ecologic services. Reclamation closely tracks the status of two large reservoirs—Lake Powell in the Upper Basin and Lake Mead in the Lower Basin—as indicators of basin storage conditions. The Drought Response Operations Agreement (DROA) defines elevation 3,525 feet as the "target elevation" at Lake Powell for minimizing the risk of the reservoir declining below 3,490 feet. The target elevation provides a 35-foot buffer above minimum power pool (elevation 3,490 feet) to allow for response actions before Lake Powell drops below 3,490 feet. Falling below target elevations would cause significant operation impacts and was previously referred to as "double dead pool" in the case that both Lake Mead and Powell would drop below their respective targets during drought.

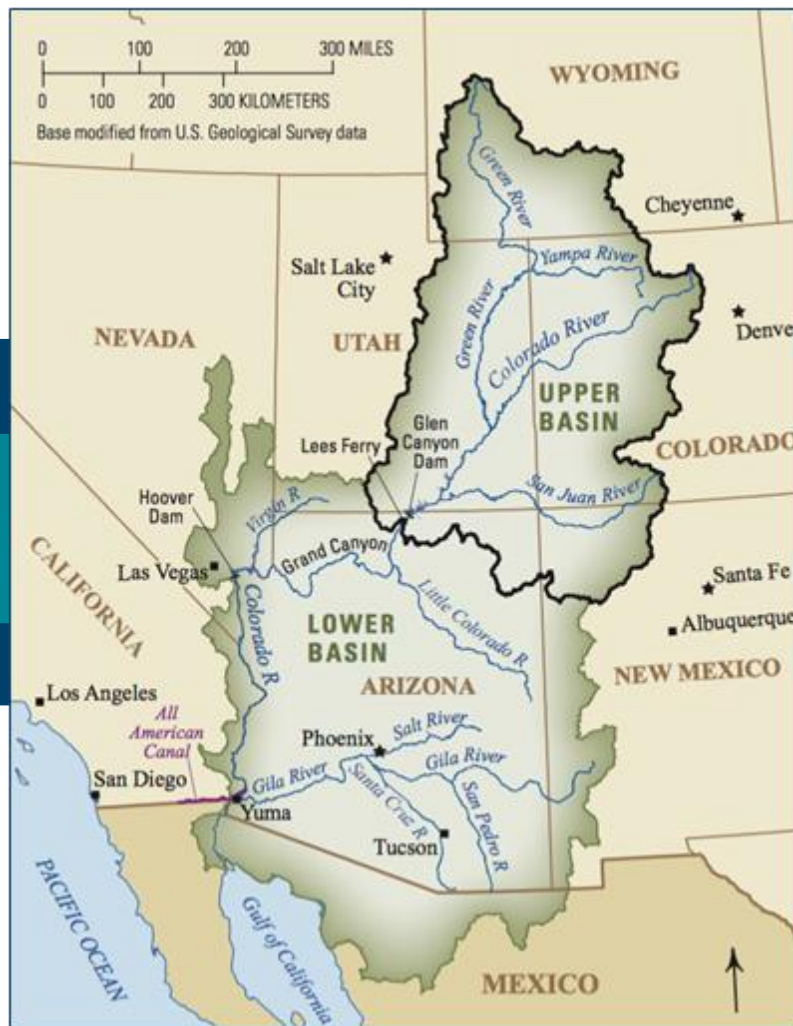


Figure 6- 1. Colorado River Basin, Source: USGS

MWD's 2025 UWMP states that imported Colorado River supplies include MWD's basic Colorado River apportionment, along with supplies that result from existing and committed programs, including those from the Imperial Irrigation District (IID)-MWD Conservation Program, the implementation of the Quantification Settlement Agreement (QSA), related agreements, and the exchange agreement with San Diego County Water Authority (SDCWA). Since the QSA, additional programs have been implemented to increase Metropolitan's supplies including the Palo Verde Irrigation District (PVID) Land Management, Crop Rotation, and Water Supply Program, as well as the Lower Colorado River Water Supply Project (MWD UWMP, 2025). The 2007 Interim Guidelines provided for the coordinated operation of Lake Powell and Lake Mead, as well as the Intentionally Created Surplus (ICS) program that allows Metropolitan to store water in Lake Mead. These stored supplies can be used to supply additional water to ensure that, when needed, MWD can deliver up to the Colorado River Aqueduct (CRA) capacity of 1.25 million acre-feet (MWD UWMP, 2025).

In 2026, a series of operation and management agreements are set to expire including the 2007 Interim Guidelines, the 2019 Drought Contingency Plans, and the international 1944

Water Treaty. Access to Colorado River water supplies post-2026 is still under negotiation, with strict conservation needed to maintain operations. Please refer to **Section 7** of this UWMP or the latest 2025 MNWD Long-Range Water Reliability Plan (LRWRP) for additional information on Upper and Lower Basin post-2026 Colorado River operations and impacts to MNWD's water reliability.

Emergency Interconnection

MNWD currently has an Emergency Interconnection Agreement with Orange County Water District (OCWD) and Irvine Ranch Water District (IRWD). The agreement also provides emergency water to the City of San Clemente, Laguna Beach County Water District, SMWD, and SCWD. Emergency supply capacity for South County varies seasonally, ranging from 0 to 18.5 cubic feet per second (cfs), with no guaranteed capacity during the summer months. MNWD has capacity rights for 58.93% of the South County total, equivalent to 0 to 22 AF per day. Additional supplies may also be available through MWD, depending on system conditions and operational constraints.

Based on the contract provisions, emergency deliveries are limited to a maximum duration of 30-days, with up to 1,768 AF total available per emergency event for MNWD. Under the agreement, IRWD and the participating agencies jointly constructed various projects to transfer water to the Aufdenkamp Transmission Main and JTM. The Emergency Interconnection is intended to be used only during emergency conditions when MWD facilities are disrupted due to seismic events or planned outages at MWD. Access to the interconnection is not intended to address drought conditions or supplement shortages from reduced regional supplies. The Emergency Interconnection capacity right decreases over time, ultimately reaching zero in 2030 when the existing agreement expires. A new Emergency Interconnection Project is currently proposed with the City of Santa Ana for up to 14 cfs of capacity for emergency use.

6.2 Groundwater

The San Juan Basin, a 26 square mile groundwater basin located in southern Orange County, is within the San Juan Creek Watershed. The San Juan Basin is comprised of four sub-basins: Upper San Juan, Middle San Juan, Lower San Juan, and Lower Trabuco and is bound on the west by the Pacific Ocean and by tertiary semi-permeable marine deposits. The San Juan Basin underlies portions of Mission Viejo, San Juan Capistrano, Dana Point, and unincorporated areas of South Orange County. The Basin is recharged through flow from San Juan Creek, Oso Creek, and Arroyo Trabuco, precipitation to the valley floor, and Hot Spring Canyon spring flows.

MNWD was formerly a member of the San Juan Basin Authority (SJBA), a joint powers authority (JPA) created in 1971 for the purpose of carrying out water resources

development of the San Juan Basin. The current members of the SJBA are SMWD and SCWD. MNWD excited the SJBA in summer of 2022. While a member agency, the District did not pump or receive water For purposes of this 2025 UWMP, the District does not have any access to groundwater. **Table 6-1** from DWR’s UWMP tables identifies no groundwater is pumped.

Table 6- 1. DWR Submittal Table 6-1, Groundwater Supplies

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)	
☒	Check the box if the Supplier does not pump groundwater. Proceed to the next table.

6.3 Surface Water

For purposes of this 2025 UWMP, the District does not have any local surface water supplies available. It is possible that local surface runoff captured in Irvine Lake could be treated at the Baker Plant and made available to project participants in the event of an emergency event. The quantity of potential local supply from Irvine Lake is undetermined, and thus not included as part of the District’s projected water supply portfolio at this time.

6.4 Storm Water

For purposes of this 2025 UWMP, the District does not have any storm water projects or storm water supplies available. As part of the OASIS Water Resource Center Program, the capture and use of storm water is being evaluated as a potential source of supply in the future. However, the quantity of potential storm water supplies from the watershed is still under evaluation, and thus from a conservative standpoint storm water is not included as part of the District’s projected water supply portfolio.

6.5 Wastewater and Recycled Water

MNWD has been a leader in wastewater reuse for irrigation purposes since 1968. Recycled water for non-potable use is delivered to customers in a separate distribution system of “purple pipes,” which are required to keep recycled water separate from drinking water pipelines. MNWD produces approximately 20 percent of its supply by capturing treated water that would normally be discharged to the ocean. Treated water is reused for irrigation and other non-potable or non-drinking uses. Every gallon of recycled water used, saves a gallon of potable drinking water. In total, about 2 billion gallons of water is saved each year using recycled water within the MNWD service area.

In 1984, MNWD constructed a 0.6 MGD Advanced Wastewater Treatment Plant (AWT) at the Regional Treatment Plant (RTP). This tertiary treatment facility initially produced water for irrigating the El Niguel Country Club in Laguna Niguel and produced approximately 350 AFY. In 1989, the AWT Plant was expanded from 0.6 to 2.4 MGD of tertiary treatment capacity to expand service from the El Niguel Country Club to Crown Valley Community Park, Laguna Niguel Regional Park, and several greenbelt areas within the City of Laguna Niguel. In 1996, MNWD constructed a second AWT Plant at the RTP with a maximum capacity of 9 MGD along with an underground reclaimed water storage tank, replacing the original 2.4 MGD plant which was later abandoned.

In 1991, MNWD constructed a 2.4 MGD AWT facility at Plant 3A to provide recycled water for irrigation use. MNWD has expanded its reclaimed water supply capacity to provide maximum month demands for the reclaimed water distribution system with service from two reclaimed water treatment plants: (1) Plant 3A AWT and (2) RTP AWT. The District also hold contracts to purchase recycled water from the SCWD, if necessary, which may then be delivered through shared facilities in Laguna Niguel. MNWD also has 1,000 AF of seasonal storage for recycled water distribution system in the Upper Oso Reservoir.

MNWD collects wastewater via a network of gravity lines, lift stations, and force mains throughout the service area. Wastewater is primarily residential with little contribution from commercial and industrial activities within the service area. The District has been at the forefront of recycled water development to diversify water supplies.

Plant 3A

The District's Plant 3A located in the city of Mission Viejo has a maximum capacity of 6 MGD and treats wastewater received from MNWD. The District owns and operates 100 percent of the treatment capacity. The District's wastewater flows average approximately 1.8 MGD. Effluent is treated to secondary or tertiary levels depending on the disposal method, ocean outfall, or beneficial reuse. Recycled water is treated to applicable Title 22 standards and used to irrigate parks and greenbelts. The District's average recycled water production is 1.2 MGD. Secondary effluent is conveyed to the San Juan Creek Outfall via the 3A Effluent Transmission Main. The District's average annual ocean discharge is 0.6 MGD.

Regional Treatment Plant

The RTP in Laguna Niguel has a 9 MGD capacity, with 4 MGD used on average from 2020 to 2025. The District owns 100 percent of the liquid treatment capacity and nearly 60 percent of solids treatment capacity, with the District providing full operation of the facility. The RTP treats wastewater from MNWD's service area to secondary or tertiary levels depending on disposal method, ocean outfall, or reuse

such as landscape irrigation. Recycled water is treated to applicable Title 22 standards and is supplied to the District. Secondary effluent is conveyed to the Aliso Creek Ocean Outfall via the SOCWA Effluent Transmission Main. Approximately 70 percent of the power needs are produced on-site from methane gas that is a byproduct of the treatment process.

Other Treatment Plant Operations

The South Orange County Wastewater Authority (SOCWA) is a Joint Powers Authority (JPA) that manages the treatment and disposal of wastewater for six retail member agencies in South Orange County. MNWD is no longer a member of SOCWA as of December 12, 2024. The District contracts with SOCWA agencies: El Toro Water District (ETWD), South Coast Water District (SCWD), and Santa Margarita Water District (SMWD), for capacity and wastewater treatment, as described below:

- The JB Latham Treatment Plant (JBLTP) located in the City of Dana Point has a 13 MGD capacity and treats wastewater from MNWD, SMWD, and SCWD to currently secondary effluent standards. The average capacity used today is approximately 6 MGD. The secondary effluent is conveyed directly to the San Juan Creek Outfall, as the plant does not have tertiary treatment. The District contracts with SCWD for capacity with annual average flows and ocean discharge to JB Latham at approximately 1.4 MGD. Currently, there is no recycled water production at this plant.
- The Aliso Creek outfall has a capacity of 33.2 MGD and extends 1.5 miles offshore near Aliso Beach in the city of Laguna Beach. The current average outfall is approximately 9.3 MGD. The District contracts with ETWD for capacity in the Aliso Creek outfall.
- The San Juan Creek outfall has a capacity of 36.8 MGD and extends 2.2 miles offshore near Doheny Beach in the City of Dana Point. The current average outfall use is approximately 10.5 MGD. Full secondary treatment is provided at all wastewater treatment plants, with most plants exceeding this level of treatment when the water is beneficially reused. The District contracts with SCWD and SMWD for capacity in the San Juan Creek Outfall.

Table 6-2 shows the share of flows to the wastewater treatment plants that the District owns and uses capacity in 2025. **Table 6-3** summarizes wastewater treatment and discharge within the service area in 2025.

Table 6- 2. DWR Submittal Table 6-2. Wastewater Collection

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area Water Code Section 10633(a)				
100%	Percentage of 2025 service area served by wastewater collection system			
100%	Percentage of 2025 service area population served by wastewater collection system			
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 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number	Is WWTP Located Within UWMP Area?
MNWD	Metered	1,783	MNWD 3A Treatment Plant, Place ID 241540	Yes
MNWD	Metered	8,038	MNWD Regional TP, Place ID 241053	Yes
MNWD	Estimated	1,568	Latham WWP, Place ID 236649	No
Total Wastewater Received from UWMP Service Area in 2025:		11,389		

Table 6- 3. DWR Submittal Table 6-3, Wastewater Treatment

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area Water Code Section 10633(b)									
☐	Check the box if no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.								
Wastewater Treatment Plant Name and Place ID Number Drop down list	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area?	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (AF)	Total 2025 Volume of Water Treated (AF)	2025 Outcomes of Treated Wastewater					
				Water Recycled Within UWMP Service Area (enter data as applicable)		Water Recycled Outside of UWMP Service Area (enter data as applicable)		Effluent Discharge that is not a Permitted Recycled Water Use (enter data as applicable)	
				Treatment Level	Volume (AF)	Treatment Level	Volume (AF)	Treatment Level	Volume (AF)
MNWD 3A Treatment Plant, Place ID 241540	Yes	1,783	1,783	Tertiary	1,069	Tertiary	-	Secondary, Undisinfected	714
MNWD Regional TP, Place ID 241053	No	8,038	8,038	Tertiary	4,562	Tertiary	-	Secondary, Undisinfected	3,477
Latham WWP, Place ID 236649	Yes	1,568	1,568	Secondary, Undisinfected	-	Secondary, Undisinfected	-	Secondary, Undisinfected	1,568
Total		11,389	11,389		5,631		0		5,759
NOTES: All wastewater received at the MNWD facilities is treated to either tertiary or secondary standards. The Latham Plant does not treat wastewater to tertiary standards, secondary effluent is produced there under SOCWA. The 3A and Regional Treatment Plant are owned and operated by MNWD.									

Current and Projected Recycled Water Uses

Table 6-4 presents the current and projected uses for recycled water in MNWD. **Table 6-5** provides a comparison of the projected 2025 recycled water demands from the 2020 UWMP with actual demands. The usage is limited to landscape irrigation with tertiary treated water meeting Title 22 standards.

MNWD typically sees customer conversions from potable to recycled water around 3-10 AF per year. **Table 6-6** indicates the projected increase in recycled water use from 2025 to 2050 as customers are converted from potable to recycled water for irrigation purposes. MNWD is constantly encouraging use of recycled water where deemed feasible, safe, and effective. For example, recycled water is used for construction purposes wherever possible. As MNWD is already at build-out, potable to recycled irrigation conversions have slowed over time. Although, opportunities for converting to landscape irrigation are still pursued and encouraged by water use efficiency programs and the recycled water group at MNWD.

In addition, MNWD is currently in planning stages for a potential Direct Potable Reuse (DPR) project, as a potential future use. Using advanced water purification, further described in **Section 6.8**, MNWD may be able to utilize recycled as a new local supply source. DPR is included in **Table 6-7** below as an expected future water supply project.

Table 6- 4. DWR Submittal Table 6-4, Recycled Water Beneficial Uses

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area Water Code Section 10633 (c),(d),(e)									
☐ Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.									
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :			3A and Regional Treatment Plant						
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :			Moulton Niguel Water District						
Volume of Supplemental Water Added in 2025 (OPTIONAL) :			Moulton Niguel Water District						
Source of 2025 Supplemental Water (OPTIONAL) :			Municipal Water District of Orange County						
Use Type Drop down list	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use
									Volume
Landscape irrigation (exc golf courses)	Non-Potable	Tertiary	4,916	4,080	4,122	4,163	4,204	4,245	215
Golf course irrigation	Non-Potable	Tertiary	749	866	874	883	892	901	0
Subtotal Potable			0	0	0	0	0	0	0
Subtotal Non-Potable			5,665	4,946	4,996	5,046	5,096	5,146	215
Total			5,665	4,946	4,996	5,046	5,096	5,146	215
NOTES: For potential recycled water use, MNWD sees new recycled water customer conversions at around 3-10 AF per year, for use as irrigation. See Table 6-6 for additional information.									

Table 6- 5. DWR Submittal Table 6-5, Recycled Water Use Comparison (2020 to 2025)

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual Water Code Section 10633(e)		
☐	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020.	
Use Type	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Landscape irrigation (exc golf courses)	5,758	4,916
Golf course irrigation	640	749
Total	6,398	5,665

Table 6- 6. DWR Submittal Table 6-6, Methods to Encourage Future Recycled Water Use

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
☐	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
Conversion from Potable	New Recycled Water Customers - Irrigation Use	2025-2050	215
Total (AF)			215
Unit Conversion to AF			215
NOTES: MNWD sees new recycled water customer conversions at around 3-10 AF per year, for use as irrigation.			

6.6 Desalinated Water

For purposes of this 2025 UWMP, the District does not have any desalinated water supplies available. As part of the District's 2025 LRWRP Update, the District reviewed ongoing local desalination projects in their various planning stages.

6.7 Exchanges or Transfers

The District does not currently have any exchange or transfer agreements in place. However, the District is always evaluating opportunities for local and regional exchanges to provide greater system and long-term reliability.

6.8 Future Water Supply Options

This section presents future water supply options that are considered in the 2025 UWMP. All projects are currently in the planning stages. The District will continue to evaluate the feasibility of implementation for the following potential projects.

Direct Potable Reuse – OASIS Water Resource Center

Direct Potable Reuse (DPR), purifying wastewater to drinking water standards and integrating it directly into the public drinking water supply, is now regulated in California. Effective as of October 1, 2024, public water systems may choose to engage in DPR projects. Over the next 5 years Southern California is likely to see additional local supplies as a result of DPR or Indirect Potable Reuse (IPR). MNWD is currently in the planning phase for the Optimized, Adaptive, Sustainable, and Integrated Supply (OASIS) Water Resource Center as a potential DPR source. As proposed, the OASIS Project would serve as a new local supply source for MNWD, potentially providing up to 3 MGD of advanced water purification.

Santa Ana Emergency Interconnection

The existing emergency interconnection agreement with IRWD is set to expire at the end of 2030. MNWD seeks to establish a new source of emergency supply in the case of a Diemer outage or other facility-related emergency response. A partnership and potential Groundwater Basin Emergency Interconnection Project is being explored with the City of Santa Ana. As currently proposed, the City of Santa Ana would make available capacity (up to 10-14 cfs) for emergency use.

The project would include construction of new facilities to pump, treat, and transfer groundwater to South Orange County. Water for South Orange County would only be available during non-drought related emergencies as defined by the MWD Administration Code, where MWD is physically unable to deliver water due to natural or catastrophic failure. The City of Santa Ana would then be able to use the well and treatment facilities continuously, in the absence of emergency response. MNWD continues to coordinate with the City of Santa Ana, OCWD, MWD, MWDOC, and other interested parties to implement this project.

6.9 Water Portfolio Summary: Existing and Planned Sources

As of 2025, MNWD's potable water supply is entirely imported water purchased from MWDOC. MNWD is planning to identify more local water supplies as a part of its future water supply portfolio, as outlined in the latest 2025 LRWRP Update.

Table 6-7 presents the expected future water supply projects that are anticipated to be in place over the next 10 years. Recycled water projects and potential direct potable reuse

initiatives will increase supply availability and reliability for the District. **Table 6-8** presents the amount of water currently available to the District. The amount used in FY 2024-2025 is provided along with each supply's water quality.

Table 6-9 presents the projected imported and recycled water supplies available to the District. Projected water supplies are estimated based on historic deliveries. Results are shown as projected through 2050, generated using MNWD's water demand model. For additional information on the methods used please see the latest MNWD 2025 LRWRP.

Table 6- 7. DWR Submittal Table 6-7, Expected Future Water Supply Projects

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)					
Name of Future Projects or Programs	Additional Description (as needed)	Potable or Non-Potable (after treatment if treated)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Supplier (AF)
Direct Potable Reuse	Optimize, Adaptive, Sustainable, Integrated, Supply (OASIS) Water Resource Center	Potable	2038	All Year Types	3,360
NOTES: The Direct Potable Reuse project currently being considered would produce up to 3 million gallons per day (MGD) or 3,360 AF per year. The OASIS Project is currently in the planning phase.					

Table 6- 8. DWR Submittal Table 6-8, Actual 2025 Water Supplies

Submittal Table 6-8 Retail: Water Supplies — Actual Water Code Section 10631(b)			
Water Supply	Additional Description	2025	
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable	Actual Volume (AF)
Purchased or Imported Water	Purchased from MWDOC	Potable	22,236
Recycled Water	Produced Locally	Non-Potable	5,665
Subtotal Potable			22,236
Subtotal Non-Potable			5,665
Total			27,901

Table 6- 9. DWR Submittal Table 6-9, Projected Water Supplies

Submittal Table 6-9 Retail: Water Supplies — Projected Water Code Section 10631 (b)							
Water Supply	Additional Detail on Water Supply	Potable or Non-Potable (after treatment if treated)	Projected Water Supply (Report to the Extent Practicable)				
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool			2030	2035	2040	2045	2050
			Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)
Purchased or Imported Water		Potable	23,066	22,235	21,704	21,090	20,477
Recycled Water		Non-Potable	4,946	4,996	5,046	5,096	5,146
Subtotal Potable			23,066	22,235	21,704	21,090	20,477
Subtotal Non-Potable			4,946	4,996	5,046	5,096	5,146
Total			28,012	27,231	26,750	26,186	25,623
NOTES: Optional columns for total entitlement are not applicable and have been removed from this table.							

6.10 Special Conditions

There are several factors that can impact water supplies. Climate variability can impact supplies, and this is previously addressed in **Section 4.6**. In summary, climate variability is expected to shift precipitation patterns and affect water supply, which will make water supply planning even more challenging. The areas of primary concern for the imported supply include the reduction in Sierra Nevada and Colorado River Basin snowpack, increased intensity and frequency of extreme weather events, and rising sea levels causing increased risk of levee failure in the Delta. Other conditions unique to each imported water source may also affect water supplies. SWP and Colorado River operations are subject to legal, environmental, and water quality factors resulting in export reductions and other operational changes. MWD has been active in responding to potential water quality concerns by protecting source water quality and developing water management programs that maintain and enhance water quality in the Colorado River system. These conditions have been considered in analyzing the availability of water supplies available to the District.

6.11 Energy Intensity

The Water Code requires that readily obtainable energy usage be included in the UWMP. Energy intensity is defined as the total amount of energy an urban water supplier expends per AF to convey water from the point of access to the point of delivery. MNWD is served by both Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E) with approximately 105 energy accounts, split across the two electric utility service areas.

Since the District imports potable water from MWDOC and MWD, the District does not have operational control over the upstream portion of the water system. The upstream supply and conveyance energy used for untreated water consists of conveyance of water from the SWP and the Colorado River through MWD's conveyance system. Refer to MWD's 2025 UWMP for information regarding energy intensity upstream of the MNWD service area.

MNWD operates water, wastewater, and recycled water facilities within its service area. Readily available energy use data was used for the analysis in this section of the UWMP. The water entering the water management process is used to calculate energy intensity in this analysis. The energy intensity of water, or the energy needed to move one unit of water through each segment of the water-use cycle (water distribution), is expressed in kilowatt per AF (kWh/AF) as shown for FY 2024-2025 in **Table 6-10**, **Table 6-11**.

Table 6- 10. MNWD FY 2024-2025 Overall Energy Intensity

MNWD Energy Data	Energy Use (kWh)	Distribution Water Use (AF)	Energy Intensity (kWh/AF)
Total	12,438,019	29,089	428

Table 6- 11. MNWD FY 2024-2025 Energy Intensity by System

FY 2024-2025			
Water System	Energy Use (kWh)	Water Use (AF)	Energy Intensity (kWh/AF)
Administration Buildings	480,880	0	NA
Collections System	2,274,074	11,389	200
Wastewater Treatment	2,557,997	11,389	225
Recycled Water Distribution	3,703,635	5,665	654
Potable Water Distribution	3,421,433	23,424	146

Potable Water Treatment and Distribution

The volume of water treated at the Baker WTP and all the imported water entering the District's water distribution process is used to calculate energy intensity in this analysis (**Table 6-11, Figure 6-2**). Potable distribution energy use is associated with the District's pumping stations, pressure reducing stations, reservoirs, and take-out structures. Energy intensity from imported water sources upstream were not incorporated as they are not readily available at this time. Please refer to MWD UWMP (imported water) and IRWD UWMP (Baker Water Treatment Plant treated water) for more information.

Wastewater and Recycled Water

This section summarizes the energy used for wastewater treatment operations and recycled water. The data is taken from the District's Southern California Edison (SCE) and San Diego Gas & Electric (SDG&E) accounts associated with MNWD's wastewater infrastructure. **Table 6-11** and **Figure 6-2** reports the energy intensities expended by recycled water and wastewater for readily available energy data. The data presented in **Table 6-11** and **Figure 6-2** does not include co-generation electricity produced at the RTP. For additional information on co-generation please refer to Energy Projects.

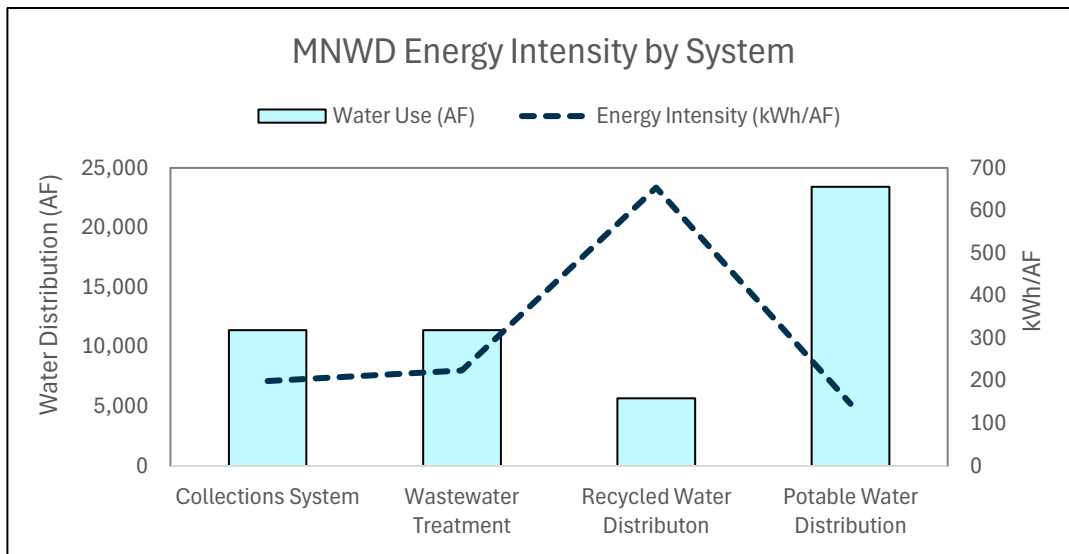


Figure 6- 2. Comparison of MNWD Energy Intensity by System

Energy Projects

The District is working to optimize energy operations and reduce costs. With the acquisition of the Regional Treatment Plant in December 2024, MWND owns and operates the co-generation system as part of the overall MNWD energy portfolio. As

shown in **Figure 6-3**, co-generation at RTP accounts for approximately 33% of overall energy use in the District, based on electricity used or produced within the service area. This energy would otherwise be attributed to wastewater treatment if purchased from SCE rather than supplied by the wastewater co-generation system (**Figure 6-4**). These values do not include natural gas usage, which is not readily available (with sub-metering by process) at the time of this analysis.

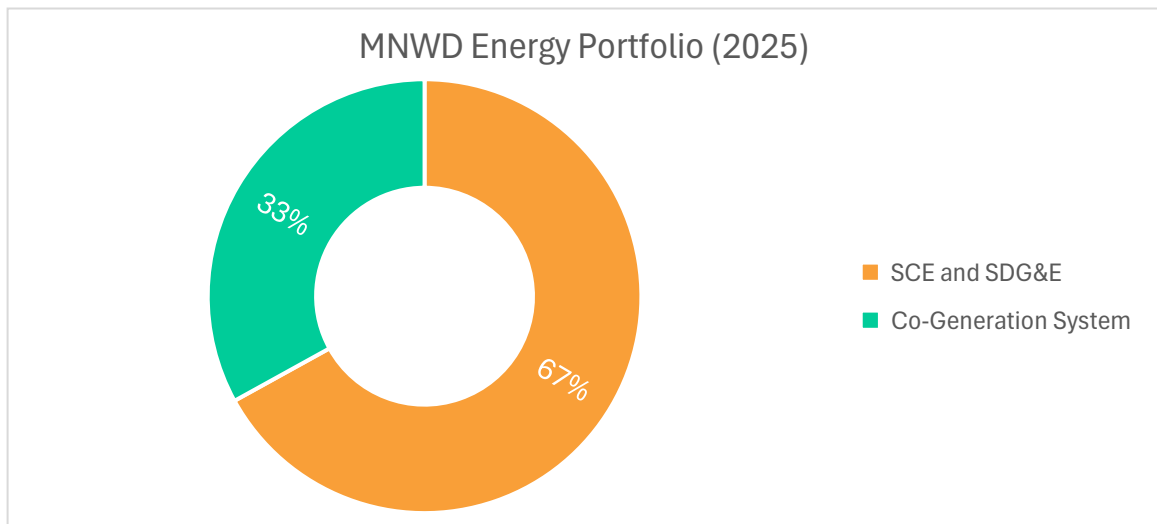


Figure 6- 3. MNWD Energy Portfolio (SCE, SDG&E, and Co-Generation)

The remaining 67% of electricity needs in **Figure 6-3** are met by SCE and SDG&E with approximately 20% used by the recycled water distribution system, 19% by the potable water distribution system, 13% by wastewater treatment (a total of 46% including co-generation), 12% by collections, and the remaining 3% by administrative buildings.

Due to the high energy intensity needed to pump and move water across the service area, a variety of projects are currently in planning and implementation stages to further offset energy usage with onsite production from sources such as solar, micro-hydro installations, and operational changes for load shifting peak usage.

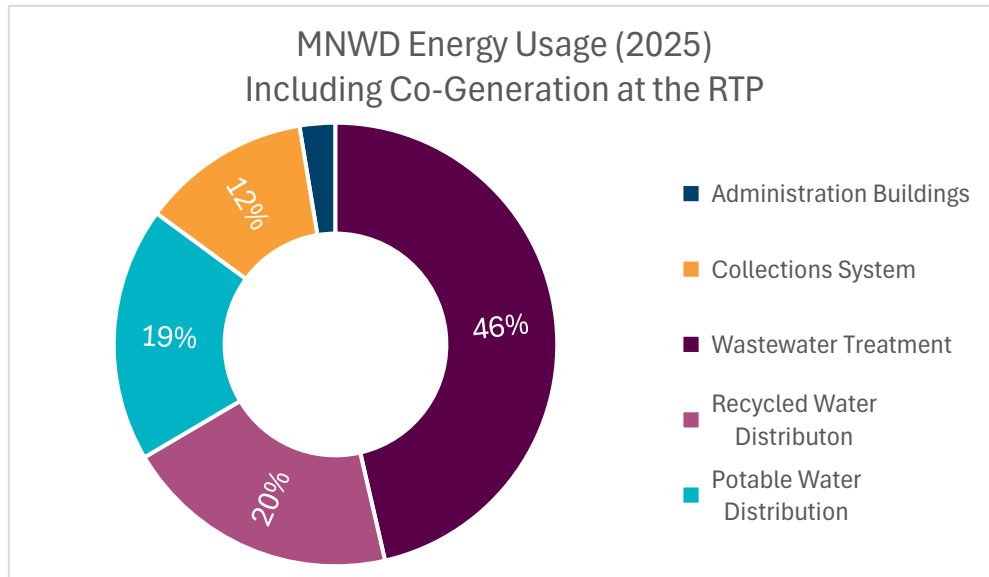


Figure 6- 4. MNWD Energy Uses, Including Co-Generation at RTP

Solar Project at District Headquarters

To be eligible for additional cost savings by signing up for net energy metering (NEW) 2.0 rate structure, new solar was installed at District Headquarters in Laguna Hills (**Figure 6-5** and **Figure 6-6**). In January 2026, solar panels were placed on existing roofs on buildings A, B, E and two vehicle parking canopies. This 400 kW system includes 936 panels and 11 inverters, which are projected to offset the entire annual energy usage at the Headquarters site.



Figure 6- 5. Solar Installation at Headquarters



Figure 6- 6. Solar Installation at Headquarters

Micro-Hydro Installation

In California, energy utilities offer a program for local government agencies and universities to receive bill credits for energy generated by renewable technologies. The Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) program allows local government agencies to generate electricity using an eligible renewable electrical generation facility with a capacity up to 5 megawatts (MW) at one generating account and transfer excess bill credits to other electricity accounts billing under the same agency name. For example, a micro-hydro installation at MNWD may generate a certain amount of power at a flow control facility that then offsets other costs across multiple pump stations, lift stations, and other energy intensive sites by receiving a set credit for the value of the electricity generated by the renewable facility.

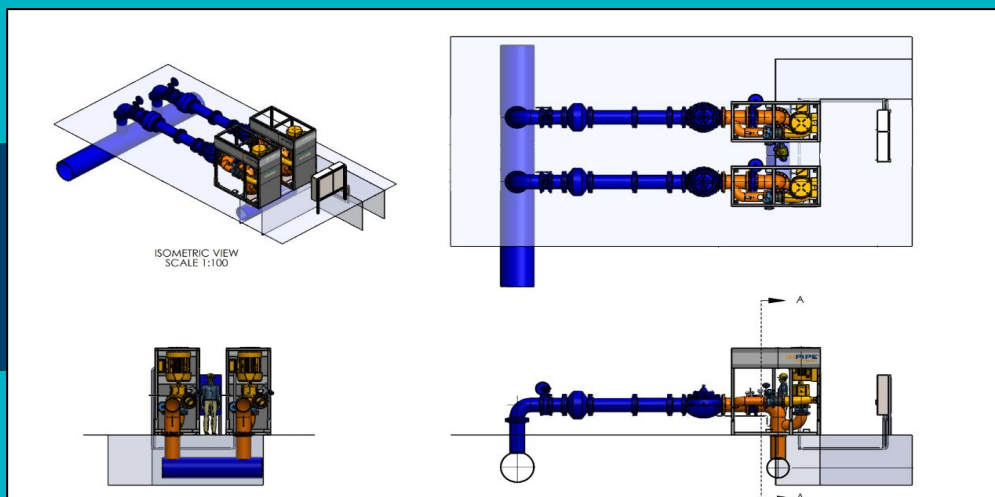


Figure 6- 7. Micro-Hydro Installation Rendering for MNWD Bridlewood Facility

SDG&E is authorized to provide service under RES-BCT on a first-come, first-serve basis until the combined rated generating capacity of participating renewable electrical generation facilities reaches a total of 20.25 MW within its service territory. MNWD was authorized under the SDG&E RES-BCT program on August 27, 2025, for a proposed micro-hydro project at MNWD's Bridlewood Flow Control Facility. The proposed facility will install two in-conduit microturbines to convert excess water pressure into clean renewable energy without disrupting water operations, as shown in the rendering of **Figure 6-7**. The in-line energy recovery system is expected to be installed in 2026, with the potential to generate up to

820,000 kWh of electricity. Credits would then be applied to 5 of the most cost-intensive locations within the MNWD service area.

Load Shifting and Optimizing Operations

Energy utilities across the state have developed time-of-use (TOU) rate programs to incentivize energy users to shift demands to take advantage of the surplus of solar energy. Water production and supply operations require a substantial amount of energy, both at the retail level and in aggregate. If water agencies can adjust more energy-intensive operations to daytime hours, it may have significant positive effect on the state's energy grid and it would act to reduce the greenhouse gas intensity of each AF delivered, since operations would be largely powered by renewable energy.

In 2017, the District partnered with Center for Water and Energy Efficiency at the University of California, Davis to evaluate opportunities to shift pumping operations to better align with the time-of-use rates. The project was funded by a \$3 million dollar grant from the California Energy Commission and resulted in the development of an new energy demand management software application, WaterWatch, a decision support tool for operators that leverages the District's hydraulic models, SCADA, GIS systems, and water consumption data. MNWD energy initiatives now include energy optimization efforts to further develop similar tools to optimize energy efficiency and shift energy loads.

To build on existing studies, MNWD is currently embarking on an Energy Optimization Study expected to be completed in 2026. The study evaluates no-cost to high-cost alternatives that include but are not limited to rate changes, operational changes for TOU and load shifting, as well as capital improvement projects. These efforts will develop a decision matrix for optimizing energy usage and minimizing energy costs in the future. As energy prices continue to increase annually, these efforts would be further supported by the solar, micro-hydro, and bill credit initiatives previously mentioned to optimize efficiency and minimize MNWD costs.

Section 7: Water Service Reliability and Drought Risk Assessment

The District currently relies on imported water supplies provided by MWD through MWDOC as well as local recycled water supply production. The following section is an assessment of the District's water service reliability during normal, dry, and multiple dry water years. This water supply and demand assessment compares the total water supply sources available with the total water use projected over the next 20 years.

7.1 Water Service Reliability Assessment

As a part of the 2025 LRWRP Update, the District compared the water demand forecast against water supplies and system capacity under various hydrologic and emergency outage scenarios. The difference between the demand and the existing supply and system capacity was used to identify and evaluate future water supply approaches that could be implemented by MNWD. The 2025 LRWRP Update then examined the relative risks of various supply options. The 2025 LRWRP Update analysis of system and supply reliability indicates that without future investments by MNWD, water supply gaps may occur as a result of system outages or hydrologic variability.

In addition, MWDOC undertook the "Orange County Water Reliability Study" to identify future conditions of regional water reliability, evaluate shortages that could be caused by seismic events or other unplanned system outages, evaluate shortages caused by hydrologic droughts and extended dry periods, and provide comparative information on local projects that could provide supply reliability benefits. Results indicate that with no new projects by MWD, MWDOC, and member agencies, and without the Delta Conveyance Project, there may be supply shortages in the future. However, emergency supply investments and water transfers demonstrate that regional reliability can be achieved in a cost-effective manner.

It is important to note that while the 2025 LRWRP Update identified potential supply gaps into 2055, MWD has always been able to provide the supply needed by MNWD. MWD projects that it will be able to continue to provide a reliable source of imported water to MNWD. As such, supply gaps identified in the 2025 LRWRP Update do not necessarily represent lack of supply but rather the amount of supply that would be more costly to obtain with MWD WSAP penalties or by purchase from other local supply sources.

Given the drought conditions experienced recently that are anticipated to occur more frequently in the future due to climate change, the potential supply gaps addressed in the 2025 LRWRP Update represent a risk to MNWD's future water supply costs that may be

better balanced with cost-effective local supplies or emergency storage or interconnections that would also increase water reliability.

This UWMP reliability assessment is based on the availability of potable and non-potable water supplies, rather than a constraint of increased costs to produce the supply. It is assumed that the District will increase its purchases of MWD supplies, as necessary, during dry years when supply is available for purchase at increased costs. Purchases of potable supplies are assumed to not exceed historical purchases. Constraints on water sources and expected water service reliability are described below for a normal year, single dry year, and five consecutive dry years projections for 2030 through 2050.

Constraints on Water Sources

The District's recycled water supply is a highly reliable supply. However, various factors have the potential to affect the availability and reliability of the District's imported potable supplies that are delivered from MWD through MWD OC. In its final draft 2025 UWMP, MWD identified risks and uncertainties that could potentially influence the reliability of its supplies associated with the following key factors:

- Colorado River Basin Drought and Operational Uncertainties
- Sacramento River-San Joaquin River Delta Challenges
- Historical and ongoing subsidence in the San Joaquin Valley
- Changing Water Supply Conditions
- Drought and Climate Change Considerations

The following discussion of key challenges are summarized from the MWD 2025 UWMP, which is expressly referenced and incorporated herein, for the purpose of providing context on the District's imported supply reliability (MWD, 2026).

Bay Delta Issues

On average, around 30 percent of Southern California's water supply moves from Northern California through the Delta, a critical link, to pumps in the south Delta. Endangered species protection and conveyance needs in the Delta have resulted in operational constraints on pumping. The Delta's declining ecosystem and the difficulties operating the SWP have led to factors that may result in export reductions, releases of additional water from storage, and other operational changes.

The District, through its coordination with MWD OC to purchase water from MWD, is linked to all activities that impact supplies conveyed through the Delta. Even though, due to physical infrastructure, the District generally receives more Colorado River water than Delta water, MWD supplies are integrated. Delta restrictions, voluntary transfers, in-region groundwater storage, and in-region surface water storage

impact imported water availability from the SWP. This section summarizes the following specific Delta challenges.

To help address some of these issues there is a proposed Delta Conveyance Project (DCP). The proposed DCP involves construction and operation of new Delta conveyance facilities to improve existing SWP facilities. New intake facilities as points of diversion would be located in the north Delta along the Sacramento River between Freeport and the confluence with Sutter Slough. A single main tunnel would convey water from the new intakes to the existing Banks Pumping Plant and potentially the federal Jones Pumping Plant in the south Delta. These new facilities would provide an alternate diversion location from the Delta and would be operated in coordination with the existing south Delta pumping facilities.

In addition to these key Bay-Delta challenges, new litigation, listings of additional species under the ESAs, or new regulatory requirements imposed by the State Water Resources Control Board (SWRCB) may adversely affect SWP operations in the future by requiring additional export reductions, releases of additional water from storage, or other operational changes impacting water supply operations.

Water Quality Concerns

Water quality challenges, such as algae toxins, per- and polyfluoroalkyl substances (PFAS), and the identification of constituents of emerging concern, have a significant impact on the region's water supply conditions. Drinking water standards for contaminants and emergency constituents may affect local groundwater sources in the future. MWD states in the 2025 UWMP that these contaminants may impact the availability of local supplies as well as the demands on these supplies if agencies abandon impacted supplies in lieu of treatment options or use MWD water to blend their sources. MWD is proactive and had been engaged in projects to protect water supplies and support local treatment options.

Water Supply Conditions: State Water Project and Colorado River Aqueduct

As previously discussed in **Section 6**, fluctuations in annual hydrologic conditions have been evident recently with its impacts being felt most severely on the SWP supply. Within the last decade, the SWP has experienced the lowest ever allocation of contract supplies, the lowest ever northern Sierra snowpack (affecting SWP's Feather River/ Lake Oroville supply), highest ever Sacramento River runoff, and the highest SWP allocation since 2006.

In 2023, California experienced substantial precipitation events across the state. As a result, DWR's most recent 2025 SWP Delivery Capability Report found that the long-term average delivery of Table A water has increased by 32,000 AF compared to the previous 2023 report. DWR considers water quality objectives, biological

opinions, and incident take permits, among other considerations in this report. Due to this recent change and updated regional modeling, DWR prepared a long term average as well as averages separated by wet periods and dry periods. The anticipated future Table A ranges from 237 TAF to 3,970 TAF. This equates to a range of approximately 5% Table A allocation to 95%.

Colorado River supply allocations are based on MWD's basic Colorado River apportionment plus committed programs such as the Imperial Irrigation District-MWD Conservation Program, implementation of the Quantification Settlement Agreement (QSA) agreements, and the exchange agreement with San Diego County Water Authority. Other programs have been implemented to increase reliability of this supply such as the Land Management, Crop Rotation, and Water Supply Program with Palo Verde Irrigation District, Lower Colorado River Water Supply Project, and several other projects to increase deliveries to the CRA.

Groundwater Basins and Local Reservoirs

Groundwater basins and local reservoirs dropped to exceptionally low operating levels due to record dry hydrology in Southern California in 2016. Due to wetter hydrology in 2017, 2019, and 2023, the groundwater basins started to recover. However, levels in groundwater basins throughout Southern California currently remain below optimum storage levels with increased accumulated overdraft, such as in the Orange County Groundwater Basin. Though MNWD does not rely on groundwater for its potable water supplies, should its neighboring suppliers in north and central Orange County experience declining reliability from its groundwater resources there may be increased regional demands on imported surface water supplies, thereby impacting regional supplies of imported surface water.

Climate Change

Climate change is expected to shift precipitation patterns and affect reliability of water supplies, which will make water supply planning even more challenging. While uncertainties remain regarding timing, magnitude, and regional impacts of climate change-related temperature and precipitation changes, researchers have identified the following specific areas of concern.

- Reduction in Sierra Nevada snowpack
- Reduction in Colorado River Basin snowpack
- Increased intensity and frequency of extreme weather events
- Rising sea levels impacts to coastal groundwater basins,

- Potential levee failure in the Delta due to seawater intrusion, increased risk of damage from storms, high-tide events, and the erosion, and
- Potential pumping cutbacks on the SWP and Central Valley Project due to salinity levels and environmental constraints.

The primary constraint to the District on the availability of imported supplies during times of supply shortages is the cost, particularly when MWD's WSAP is in effect. In terms of quantity and reliability, MWD has an extensive supply augmentation program to assure its member agencies that their current and projected demands for imported supplies are expected to be reliably met through 2050 during average normal, single dry, and multiple-dry year conditions. In MWD's 2025 UWMP supplies are stated to be reliable through 2050 "under conditions required by the UWMP Planning Act," with an extensive "Justification for Supply Projections" included for assumptions of future projects to resolve potential supply gaps (MWD 2025 UWMP: Appendix C). Additionally, MWD states in the 2025 UWMP that:

"Supply capabilities are expected to exceed its projected water use for the year 2027. However, estimates of projected water supply and use reveal that there could be a possible shortfall of core supplies in 2026, 2028, 2029, and 2030."

To improve long term supply availability and reliability for the region, MWD has developed an adaptive management strategy known as the Climate Adaptation Master Plan for Water (CAMP4W). CAMP4W builds on the existing Integrated Resources Plan framework and attempts to further address supply uncertainty with adaptive mitigation measures. Reliability targets were established for imported and local water supplies and water conservation to, if successful, provide a future without water shortages and mandatory restrictions under planned conditions. For imported supplies, MWD looks to make investments in additional partnerships and initiatives to maximize Colorado River Aqueduct deliveries in dry years.

For the SWP, MWD is looking to make ecologically-sound infrastructure investments so that the water system can capture sufficient supplies to help meet average year demands and to refill MWD's storage network in above-average and wet years. Lowering regional residential demand through water efficiency programs, reducing water use from outdoor landscaping, and advancing additional local supplies are among the actions MWD has undertaken to keep supplies and demands in balance.

Recent Water Studies and Evaluations

Since the District relies on imported water supplies (in addition to recycled water) to meet its demands, the reliability levels during all hydrologic year types reflect MWD's determination of its ability to reliably meet the demands of its member agencies. Notably, the MWD 2025 UWMP determines that MWD is able to meet the current and projected demands of its member agencies under all three hydrologic conditions through 2050 by developing and implementing water resources programs and activities through its IRP and CAMP4W preferred resource mix. This mix includes conservation; local resources such as recycled water and groundwater recovery; Colorado River supplies and transfers; SWP supplies and transfers; in-region surface reservoir storage; in-region groundwater storage; and out-of-region banking, treatment, conveyance, and infrastructure improvements.

Although MWD's reliability assumptions were used in this analysis, MWDOC's assumptions are equally important to the District. As presented in its 2025 UWMP, MWDOC has determined that it is able to meet water demands during all hydrologic year types through 2050. Similar to MWD, the reliability levels from MWDOC are due to its diversified supplies, comprehensive management, and conservation efforts collaborating with the member agencies.

7.2 Service Reliability: Projected Supply and Demand

An assessment of District supply reliability under normal, single dry, and multiple dry years is presented here. Responses to an actual drought will follow the water use efficiency mandates of MWD's Water Shortage Contingency Plan (WSCP) and Water Supply Allocation Plan (WSAP), along with implementation of the appropriate stage of the District's own WSCP and associated Ordinance included in **Appendix C**.

Water Service Reliability - Normal Year. MNWD has entitlements to receive imported water from MWD and has the capacity in existing transmission facilities to convey enough supply to meet its projected demands. **Table 7-1 and 7-2** compares projected District water demands and the availability of future supplies to meet these demands under normal or average years through 2050. Supply totals reflect the availability of locally produced recycled water and water imported by MWD via MWDOC. The projected imported supply is estimated based on historical deliveries. Notably, both MWD and MWDOC have documented that they can reliably meet the demands of member agencies over the next 25 years.

Table 7- 1. DWR Submittal Table 7-2, Normal Supply Use Potable

Submittal Table 7-2 (A) Retail: Normal Year Supply and Use Comparison - POTABLE					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	23,066	22,235	21,704	21,090	20,477
Use totals (autofill from Submittal Table 4-2 R)	23,066	22,235	21,704	21,090	20,477
Revised Surplus/(shortfall)	0	0	0	0	0
NOTES: Optional table is used to split imported water and recycled water.					

Table 7- 2. DWR Submittal Table 7-2, Normal Supply Use Non-Potable

Submittal Table 7-2 (B) Retail: Normal Year Supply and Use Comparison - NON-POTABLE					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	4,946	4,996	5,046	5,096	5,146
Use totals (autofill from Submittal Table 4-2 R)	4,946	4,996	5,046	5,096	5,146
Revised Surplus/(shortfall)	0	0	0	0	0
NOTES: Optional table is used to split imported water and recycled water. Recycled water is treated to tertiary levels for use by customers. Additional “surplus” of recycled water is only treated to secondary and discharged as effluent. Due to the differing levels of treatment, recycled water that is not treated for use by customers is not included in this table. Please see Section 6, Table 6-3, for additional information.					

Water Service Reliability - Single Dry Year. District supplies and demands were analyzed to determine impacts associated with a single dry year. District’s historical water demands were analyzed for periods of continuous drought. Specifically, changes in imported water use between FY 2008 to FY 2010, FY 2013 to FY 2015, and FY 2019 to FY 2022 were identified as periods of recent multi-year drought thus reflecting current outdoor demands on the system. There was an average decrease in demand across each 3 year period of approximately 13%. Of the three evaluated drought periods, demand increased by 2% in the first year of drought, and then saw significant decline in each subsequent year averaging approximately 6% per year in the second year and 12% per year in the third.

For a conservative approach, the 2% increase in demands was used for a single dry year as shown in **Table 7-3**. Note that MWD and MWDOC have documented that their service areas are projected to be reliable in single dry years through 2050.

Table 7- 3. DWR Submittal Table 7-3, Single Dry Year Supply

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals	23,527	22,680	22,138	21,512	20,887
Use totals	23,527	22,680	22,138	21,512	20,887
Surplus/(shortfall)	0	0	0	0	0
NOTES: Includes imported water supply and demands.					

Water Service Reliability - Five Consecutive Dry Years. For the multiple year drought analysis, approximately a 6% decrease was assumed in the second year. Followed by a scale of diminishing returns in each subsequent year (1.5%, 1%, and 0.75%), as shown in **Table 7-4**. These reduced decreases in demand reflect the District's demand management programs as well as diminishing returns discussed in **Section 9, Demand Management Measures** and **Appendix C**.

Table 7- 4. DWR Submittal Table 7-4, Multiple Dry Year Analysis

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	23,527	22,680	22,138	21,512	20,887
	Use totals	23,527	22,680	22,138	21,512	20,887
	Surplus/(shortfall)	0	0	0	0	0
Second year	Supply totals	22,040	21,246	20,738	20,151	19,566
	Use totals	22,040	21,246	20,738	20,151	19,566
	Surplus/(shortfall)	0	0	0	0	0
Third year	Supply totals	21,709	20,927	20,427	19,849	19,272
	Use totals	21,709	20,927	20,427	19,849	19,272
	Surplus/(shortfall)	0	0	0	0	0
Fourth year	Supply totals	21,492	20,718	20,223	19,651	19,080
	Use totals	21,492	20,718	20,223	19,651	19,080
	Surplus/(shortfall)	0	0	0	0	0
Fifth year	Supply totals	21,331	20,562	20,071	19,503	18,936
	Use totals	21,331	20,562	20,071	19,503	18,936
	Surplus/(shortfall)	0	0	0	0	0
NOTES: Assessment includes modeled customer demand projections and imported supplies used to meet imported water demands over the next 20 years.						

Due to MNWD’s water based budget rate structure and proactive water use efficiency outreach, water demands typically decrease over time as outreach efforts take effect. The third dry year will typically decrease over the second year depending on outreach efforts. **Table 7-4** presents a comparison of projected multiple dry-year water supply availability to the multiple dry-year water demand. Based on the reliability of MWD supply, the region can provide reliable water supplies under all years of the multiple dry year hydrology.

MWD and MWDOC have documented that deliveries within their service areas are projected to be reliable in multiple dry years. The MNWD recycled water supply is also 100 percent reliable to meet all projected non-potable demand, across all year types.

Management Tools and Options

Water management tools help maximize local resources and minimize the need to import water from the Colorado River and Delta have been developed over the years. These include the expansion of the MNWD recycled water program, a budget-based pricing policy, and additional demand management activities, further discussed in **Section 9** and **Appendix C**.

MWD continues to develop its supply portfolio to reduce dependence on Delta supplies, particularly during dry and multiple dry years. Projects include multi-year water transfers and new diversion and conveyance facility exporting water from the Delta. Increased regional self-reliance primarily comes from water use efficiency, conjunctive use projects, water recycled, and local water supply and storage projects. Since the District has no control over the sources of water MWD provides, consistency documented in MWD's 2025 UWMP is incorporated here by reference.

7.3 Drought Risk Assessment

The Drought Risk Assessment (DRA) offers an opportunity to evaluate the District's near-term supply reliability by assuming five consecutive years of drought or dry conditions. The analysis of a five-year drought beginning in 2026 reflects the water service reliability assessment required under Water Code Section 10635(b).

Data, Methods, and Basis for Shortage Condition

MNWD relies on imported supplies and locally developed recycled water. The assessment of imported water supplies takes into consideration historical drought hydrology, plausible changes in projected supplies and demands, anticipated regulatory changes, and other applicable criteria MWD utilized in assessing potential regional supplies.

The DRA assumed that the five driest consecutive years on record for the water supplier will occur over the next five years. Changes that may influence the DRA include wetter or drier monthly and annual hydrology due to normal and climate change-induced conditions, an increase in the availability of imported supplies due to MWD and MWDOC enhancing their supply portfolios, and the increased offset of potable supplies with recycled water to meet non-potable water demands.

Normal unconstrained projected water use (demands) identified in **Section 4, Projected Water Use**, was used here as the base demands to compare against supply availability, and prior to determining if implementation of any shortage actions is needed to reduce these demands. The 2025 water demands were modified annually over five years to 2030. Accounting for changes in demand due to dry-year conditions, as noted in **Table 7-4**, demand increased by approximately 2 percent during the first year of a five-year drought, and then decreased in the second through fifth year.

Assessment Water Source Reliability

The District relies entirely on imported water and recycled water to meet demands within its service area. In determining the reliability of each water source, the MWD and MWDOC 2025 UWMPs were reviewed for the assessment of reliability of water supplies. It is documented that the imported supply was 100 percent reliable for non-SWP dependent

areas during the previous multiple year droughts. MWD evaluated its water shortage risk and determined that it has sufficient supply for a drought period starting in 2026 that lasts through 2030 based on the driest five-year historical sequence. There may be shortfalls for base supplies, although MWD stated they are reliable to meet service area demands under their supply projection justification. It should be noted that MWD, MWDOC, and MNWD water reliability analyses are based on historical drought conditions and modeled assumptions. There may be changes to projected supply if assumed projects are not implemented. Regulatory requirements may also alter available supplies in the future.

MWD determined that it has sufficient supply capabilities to meet expected demands from 2030 through 2050 under normal year, a single dry year condition, as well as a period of drought lasting five consecutive water years (MWD, 2025). Regarding short term outages, if the District's imported treated water supply from MWD and MWDOC were to become unavailable for any outage reason, the Baker WTP may also be used to treat raw water imported or provided from local sources via the Baker Pipeline. The District has increased local emergency reliability by participating in the Baker WTP, implemented back in 2017.

The District's recycled water supply is a highly reliable supply to continue meeting landscaping and other non-potable water demands within the service area in the future. Although this supply can be impacted by drought conditions due to a reduction in indoor water usage during long term droughts, thus reducing wastewater production, it is not anticipated that dry year conditions will result in a significant reduction to impact recycled water supplies. This is because there is more supply than demand and the greatest dry year water savings are typically achieved through reductions in outdoor landscaping use rather than indoor wastewater generating uses. Recent reductions during multiple year droughts did not result in any limitations on the availability of the non-potable supply.

Total Water Supply and Water Use Comparison

Table 7-5 demonstrates supply reliability during a hypothetical five-year drought starting in 2026. Due to the availability of imported and recycled water supplies, total water use can be met with the supplies. Supplies do not need to be augmented over this five-year period to meet demands and water use reductions are not required to meet available supply. The District has a very effective water use management program under dry year or emergency conditions that is employed as needed and has historically resulted in a significant reduction in water demand by the third year. Again, the DRA was conservative in not reflecting the typical reduction in water use by showing diminishing returns for a more conservative assumption. There is no shortfall due to the District's reliable water supplies.

In accordance with the compiled information and analyses provided herein, and as documented in the 2025 UWMPs prepared by MWD and MWDOC, MNWD is projected to supply water for customers' demands in all hydrological years through 2050, even with a

potential increase in dry year demands. The reliability of supplies reflects regional projects and comprehensive water supply planning by MWD and MWDOC, as well as the long-range planning the District has undertaken to develop its recycled water supplies and efficiency programs. As projected, MNWD will continue to further reduce reliance on imported water.

Table 7- 5. DWR Submittal Table 7-5, 5-Year Drought Risk Assessment

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	Total
Total Water Use (AF)	22,680
Total Supplies (AF)	22,680
Surplus/Shortfall w/o WSCP Action	0
2027	Total
Total Water Use (AF)	22,382
Total Supplies (AF)	22,382
Surplus/Shortfall w/o WSCP Action	0
2028	Total
Total Water Use (AF)	22,046
Total Supplies (AF)	22,046
Surplus/Shortfall w/o WSCP Action	0
2029	Total
Total Water Use (AF)	21,825
Total Supplies (AF)	21,825
Surplus/Shortfall w/o WSCP Action	0
2030	Total
Total Water Use (AF)	21,662
Total Supplies (AF)	21,662
Surplus/Shortfall w/o WSCP Action	0
NOTES: Projections are based on modeled customer demands as well as historic response to water efficiency outreach campaigns conducted in response to drought. Potable demands are met 100% by imported water, purchased from MWDOC and conveyed by MWD.	

Section 8: Water Shortage Contingency Planning

8.1 Overview of Water Shortage Contingency Planning

California Water Code Section 10632 requires that every urban water supplier prepare and adopt a Water Shortage Contingency Plan (WSCP) as part of its UWMP. The 2026 WSCP has been prepared to incorporate new legislative requirements regarding non-functional turf as well as provide general updates to the content and assessments contained therein.

8.2 Summary of Sections and Requirements

This 2026 WSCP addresses and incorporates the required elements set forth by CWC Section 10632, including the following requirements:

- ✓ Key attributes of the urban water supplier's water supply reliability analysis.
- ✓ Six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, 50- and greater than 50-percent shortage.
- ✓ Locally appropriate "shortage response actions" for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands.
- ✓ Procedures for conducting and approving an annual water supply and demand assessment with prescribed elements that are required.
- ✓ Monitoring and reporting requirements and procedures to ensure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements.
- ✓ A reevaluation and improvement process to assess the functionality of the urban water supplier's WSCP and to make appropriate adjustments.
- ✓ A seismic risk assessment and mitigation plan to assess the vulnerability of each of the various facilities of a supplier's water system and to mitigate those vulnerabilities. An urban water supplier may comply by submitting, a copy of the most recent adopted local hazard mitigation plan or multi-hazard mitigation plan under the federal Disaster Mitigation Act of 2000.

In addition, the WSCP addresses recent legislation from Assembly Bill (AB) 1572 which was passed on October 13, 2023. AB 1572 effectively amends CWC Sections 10540, 10608.12, and 10608.22 to prohibit the use of potable water to irrigate nonfunctional turf on commercial, industrial, municipal, and institutional properties and on common areas of properties of homeowners' associations over a staggered timeline through 2031.

MNWD's WSCP has been updated to address each of these requirements and is organized into the following chapters:

- **Chapter 1** – Introduction of the WSCP
- **Chapter 2** – Summary of the water supply analysis and water reliability findings from the 2025 UWMP.
- **Chapter 3** – Description of procedures to conduct and approve the Annual Supply and Demand Assessment.
- **Chapter 4** – Explanation of the WSCP's six standard water shortage levels: up to 10, 20, 30, 40, 50, and more than 50 percent shortages.
- **Chapter 5** – Description of the WSCP's shortage response actions that align with the defined shortage levels.
- **Chapter 6** – Identifies the District's communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.
- **Chapter 7** – Identifies the compliance and enforcement measures the District will implement to achieve a reduction in water use.
- **Chapter 8** – Description of the legal authorities that enable the District to implement and enforce its shortage response actions.
- **Chapter 9** – Description of the financial consequences of and responses for each supply shortage stage.
- **Chapter 10** – Identifies how the District will monitor and report water use to ensure the shortage response actions are being achieved.
- **Chapter 11** – Identifies procedures for evaluating the functionality of the WSCP and describes the process to adopt, submit, and amend the WSCP.
- **Chapter 12** – Identifies and defines special water features.
- **Chapter 13** – Identifies the plan, adoption and submittal process for the WSCP.

8.3 Standard Tables and Key Information

MNWD uses the six standard shortage levels in the WSCP (**Table 8-1**). Each stage or level is associated with a water conservation target and applied to both long-term supply shortages and catastrophic interruptions to water supplies (**Table 8-2**). The water shortage stages may be implemented in any reasonable order as determined by the Board.

Higher stages will be implemented if additional demand reductions are required to address increasing water supply shortages. Each stage consists of specific requirements, prohibitions, conservation penalties, and relevant rate structure modifications to encourage the appropriate level of conservation (**Table 8-3**). Detailed information for each WSCP stage is provided in **Appendix C: MNWD 2026 Water Shortage Contingency Plan**.

Table 8- 1. Six Standard Shortage Levels (1-6)

WSCP Stage	Percent Supply Reduction	Customer Action Type
Level 1	≤10%	Voluntary
Level 2	10 – 20%	Mandatory
Level 3	20 – 30%	Mandatory
Level 4	30 – 40%	Mandatory
Level 5	40 – 50%	Mandatory
Level 6	≥50%	Mandatory

Table 8- 2. DWR Submittal Table 8-2, Supply Augmentation and Other Actions

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
Yes	Is the Supplier completing this table using the standard six levels?			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
1	Other Purchases	Volume	1,112	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
2	Other Purchases	Volume	2,224	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
3	Other Purchases	Volume	3,335	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
4	Other Purchases	Volume	4,447	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
5	Other Actions (describe)	Volume	1,768	Emergency supply available from South Orange County interconnection during emergency water shortages. The maximum incident volume IRWD will supply is 1,768 AF, until 2030.
6	Other Actions (describe)	Volume	1,768	Emergency supply available from South Orange County interconnection during emergency water shortages. The maximum incident volume IRWD will supply is 1,768 AF, until 2030.
NOTES: The other purchase amounts listed in Stages 1-4 are based on 2025 potable water use. It is assumed the District could purchase additional supplies from MWD at potentially higher tier rates to supplement supplies during a drought; up to 5 percent for Stage 1, 10 percent for Stage 2, 15 percent for Stage 3 and 20 percent for Stage 4. Stages 5 and 6 may have access to emergency supply from our interconnection agreement (i.e., from emergency outages and not during a drought).				

Table 8- 3. DWR Submittal Table 8-3, Demand Reduction Actions

Submittal Table 8-3 Retail: Demand Reduction Actions Water Code Section 10632(a)(4)(B),(D), and (E)					
Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?		Additional Explanation or Reference	Penalty, Charge, or Other Enforcement?
		Volume or Percentage	Shortage Gap Reduction Value (AF)		
1	Expand Public Information Campaign	Volume	125	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency programs.	No
1	Other Actions (describe)	Volume	2,099	Voluntary Reductions through conservation BMPs.	No
2	Expand Public Information Campaign	Volume	240	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
2	Implement or Modify Drought Rate Structure or Surcharge	Volume	4,207	Conservation Penalty applied to water use in excess of 125% of water budget.	Yes
3	Expand Public Information Campaign	Volume	340	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
3	Implement or Modify Drought Rate Structure or Surcharge	Volume	6,331	Conservation Penalty applied to water use in excess of 100% of water budget.	Yes

4	Expand Public Information Campaign	Volume	430	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
4	Implement or Modify Drought Rate Structure or Surcharge	Volume	8,464	Conservation Penalty applied to water use in excess of 60% of outdoor water budget.	Yes
5	Expand Public Information Campaign	Volume	515	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
5	Implement or Modify Drought Rate Structure or Surcharge	Volume	10,603	Conservation Penalty applied to water use in excess of 30% of outdoor water budget.	Yes
6	Expand Public Information Campaign	Volume	565	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
6	Implement or Modify Drought Rate Structure or Surcharge	Volume	11,664	Conservation Penalty applied to residential outdoor water use in excess of outdoor water budget and indoor water budget usage above 40 GPCD; all outdoor irrigation with potable water shall be prohibited – potable irrigation customers subject to conservation penalty for each unit of water used.	Yes
NOTES: Demand reduction estimates are based on 2025 actual potable water use. Quantified amounts assumes reductions up to 10 percent for Stage 1, 20 percent for Stage 2, 30 percent for Stage 3, 40 percent for Stage 4, 50 percent for Stage 5, and 60 percent for Stage 6. Actual demand reductions achieved during the WSCP stage may or may not fall within the range identified in the WSCP. The demand reduction estimates for the drought rate structure or surcharge are based on conditions experienced in the 2015 extreme drought and subsequent 5-year studies regarding price elasticity of water. While the demand reduction estimates are quantified in this table for each action; there is a relationship between rates, outreach, and customer understanding to overall water demand reduction. These estimates were made for purposes of this table; however, direct conclusions should not be drawn since there is a critical dependency on human behavior changes paired with outreach and education efforts.					

Seismic Risk Assessment and Mitigation Plan

MNWD and 14 water and wastewater utilities throughout Orange County participate in the Orange County Regional Water & Wastewater Multi-Jurisdictional Hazard Mitigation Plan (MJHMP). The MJHMP provides a framework for water and wastewater utilities in Orange County to reduce their vulnerability to the impacts of natural and man-made hazard events such as earthquakes, flooding, and hazardous materials spills. The 2024 MJHMP is available on MWDOC's website: <https://www.mnwd.com/wp-content/uploads/Orange-County-Water-and-Wastewater-MJHMP-Base-Plan.pdf>

MNWD's seismic and mitigation hazard assessment are contained in Annex H of the MJHMP [Orange County Water and Wastewater MJHMP All Annexes.pdf](#). The following **Table 8-4** provides a brief summary of the seismic findings. As shown in **Figure 8-1**, MNWD's service area is prone to moderate to high seismic hazards, which may impact infrastructure in the future. Climate change is anticipated to impact liquefaction potential within the MNWD service area as periods of both intense rain and drought could potentially increase or decrease groundwater elevations, depending on the circumstances.

Table 8- 4. MJHMP ANNEX H, MNWD Infrastructure and Exposure to Seismic Hazards

Hazard		Infrastructure Type					
		Interties	Pump Stations	Reservoirs	Potable Pipeline (miles)	Wastewater Pipeline (miles)	Effluent Pipeline (miles)
Seismic Shaking	Moderate	5	14	19	74.1	9.1	0
	High	7	8	6	165.2	59.3	5.2
	Extreme	0	0	0	0	0	0
Liquefaction	Moderate	0	3	1	8.3	39.0	0
	High	0	0	0	0	1.2	0
	Very High	0	0	0	0	0	0
	Unknown	2	1	0	30.9	22.0	0

These hazards may be mitigated by a series of MNWD Mitigation Actions. The latest 2024 MJHMP identifies mitigation actions including priority, hazard addressed, risk, timeframe, and potential funding sources. New proposed mitigation projects for seismic hazard include transmission main rehabilitation, replacements, and construction of secondary takeouts for increased resiliency. Please see ANNEX H for more information.

There are no extreme seismic hazards in the service area. The WSCP is designed to address water shortages as a result of limited supplies or outage to key infrastructure. As described in the next section, **Section 9: Demand Management Measures**, MNWD has numerous programs in place to promote reductions in customer water demands, including water budget-based rate structure (WBBRS), education campaigns, conversions from potable to recycled water, as well as rebate programs to connect customers to valuable resources.

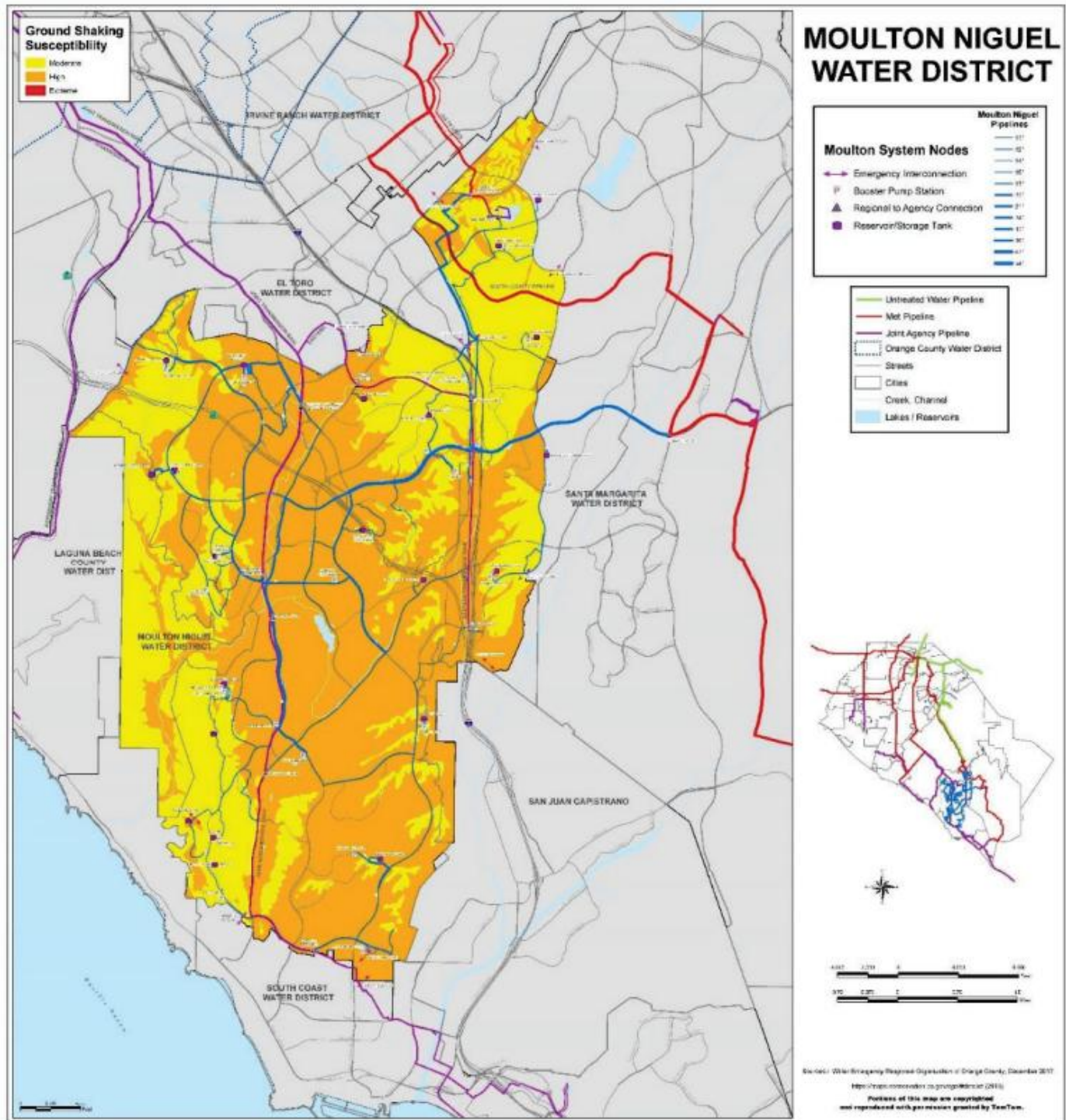


Figure 8- 1. MNWD Seismic Hazards for Potable System

Section 9: Demand Management Measures

Since 2010, the District has dramatically expanded demand management programs as a core function of its efforts to increase supply reliability by reducing demand for imported water supplies. Although the District is well below its SBX7-7 compliance target of 173 GPCD (see **Section 5**), water efficiency and supply reliability will remain high priorities. Demand management program expansion began with a transformation of the District's relatively flat, five-tiered rate structure to a Water Budget Based Rate System (WBBS), which features a strong conservation price signal. In addition to incentivizing efficient water use the revenue generated by the higher price for out-of-budget water use provides funding for robust rebate and outreach programs. This Section provides a detailed overview of the policies in place and the history of the development of demand management programs.

9.1 Water Conservation and Waste Prevention Ordinances

As discussed in the WSCP (**Appendix C**), the District updated its WSCP Ordinance in June 2026 to expand water conservation best management practices, and to adopt its updated WSCP which can be enacted in times of drought, water shortages, and water shortage emergencies. Ordinance 26-XX (to be adopted) prescribes water conservation rules and regulations, as well as water conservation best management practices which shall be in effect at all times. These practices are described in **Appendix C**.

9.2 Metering

All service connections in the District's service area are metered. Meter accuracy is a top priority at MNWD. As such, the District maintains a robust meter testing and replacement program. Each year, the District evaluates a random representative sample of residential meters at different flow volumes to assess the accuracy of its small meter population. Commercial meter testing is performed on a 3-year schedule with high-volume meters prioritized for more frequent testing to optimize resources and minimize non-revenue water. On average, 3,000 of the District's roughly 55,000 meters are replaced annually.

Since 2022, Advanced Metering Infrastructure (AMI) has been fully deployed across the entire service area including recycled and potable water dedicated irrigation, commercial, multi-family, and residential accounts. Through more than \$2 million in federal grants received from the U.S. Department of Interior Bureau of Reclamation, the District has progressively updated meter technology as part of its AMI program, which is estimated to save more than 500 million gallons of water every year. These upgraded smart meters help the District improve operations and enable all customers to monitor their hourly water usage through the MyWater MNWD online customer portal. As of FY 2025–2026, the

District has 40,387 registered accounts, about 75 percent of all accounts, reflecting the strong adoption of the online portal, which offers customers the convenience of paying bills and managing their water use in one place.

9.3 Efficiency Pricing

The District first implemented WBBRS in July of 2011 and further refined the structure in 2015 and again in 2018. The WBBRS encourages efficiency by providing each customer with a customized monthly water budget designed to provide an efficient amount of water for each customer's indoor and outdoor water use needs. The underlying rationale of the WBBRS is that customers who use water in excess of their calculated water budgets place greater demands on the District's Potable Water and Recycled Water Systems than those who use water within their calculated water budgets. Efficient water use is billed at the lowest price, while usage that exceeds the budget is billed at progressively higher rates.

Figure 9-1 shows how the price per unit consumed increases as water use increases. By emphasizing efficient use, the rate structure motivates customers to partner with the District in its effort to maintain a reliable source of water.

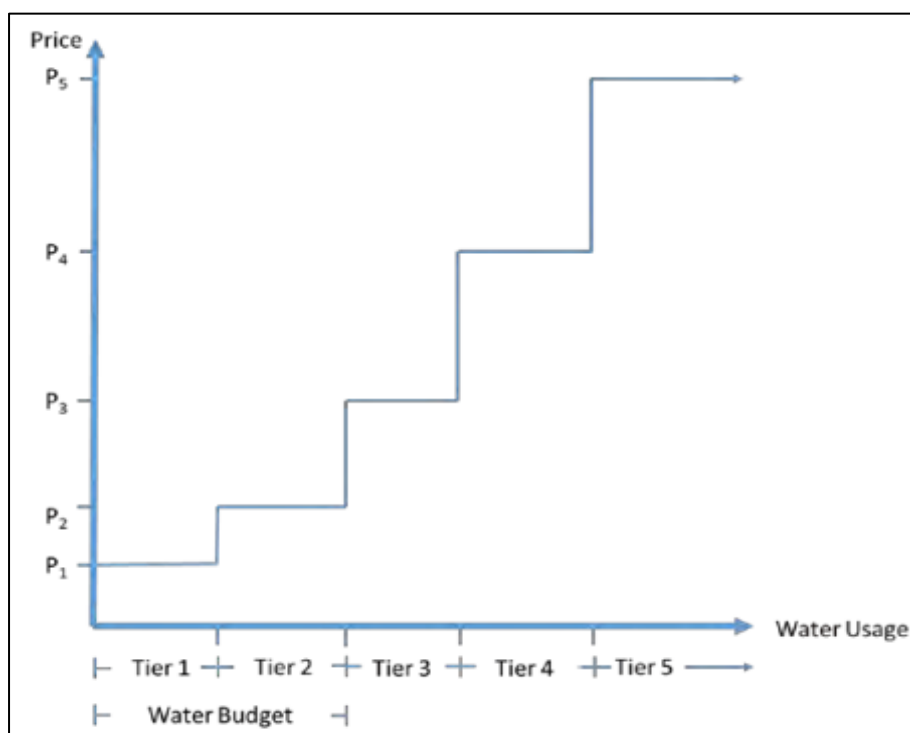


Figure 9-1. Example of Tiered Rates

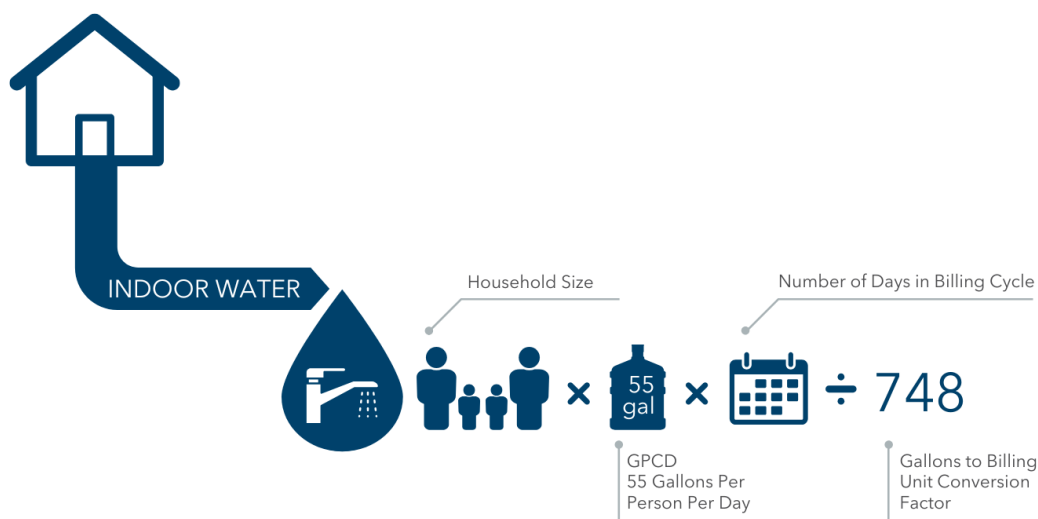
The District provides a five-tier rate structure for its residential customers (e.g., single-family, and multi-family) and a four-tier rate structure for its non-residential customers (e.g., commercial, potable water irrigation, and recycled water irrigation). The total water budget for residential customers consists of Tiers 1 and 2, in which Tier 1 is the monthly

calculated indoor water budget and Tier 2 is the monthly calculated outdoor water budget. Tier 1 represents the total water budget for non-residential customers. Customers who exceed their water budgets are billed at rates associated with higher tiers depending on how much excess water is used relative to their total water budget, as shown in **Table 9-1**.

Table 9- 1. Tier Widths by Customer Type

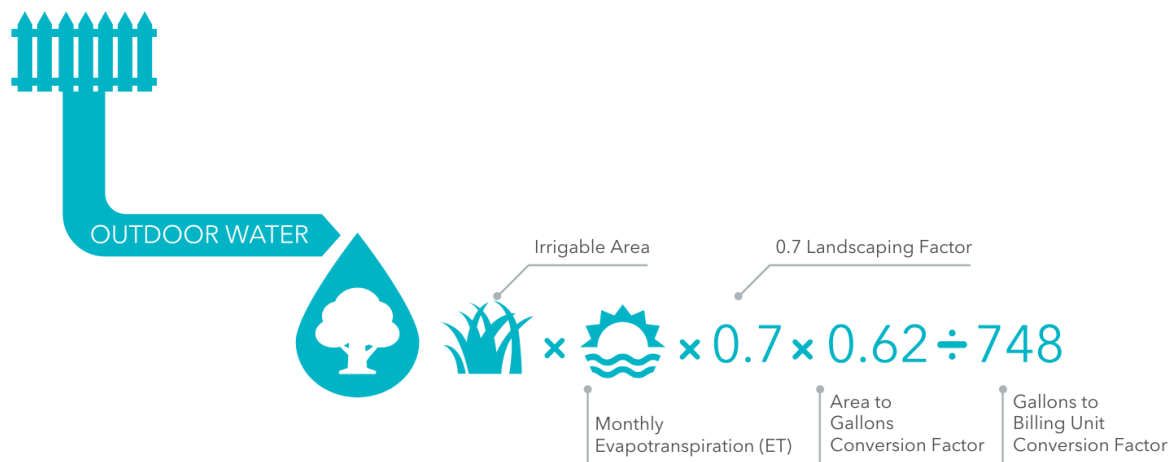
Tier	Single-family, Multi-family Residential	Commercial, Potable Irrigation, and Recycled Irrigation
Tier 1	Indoor Water Budget	Total Water Budget
Tier 2	Outdoor Water Budget	101% to 125% of Water Budget
Tier 3	101% to 125% of Total Water Budget	126% to 150% of Total Water Budget
Tier 4	126% to 150% of Total Water Budget	Over 150% of Total Water Budget
Tier 5	Over 150% of Total Water Budget	Not Applicable

Monthly water budgets are determined using the equation shown in **Figure 9-2** and **Figure 9-3**. The residential indoor water budget (i.e., Tier 1) is determined by multiplying the number of people in the household by 55 gallons per person per day. All outdoor water budgets (i.e., Tier 2 for residential and Tier 1 for potable and recycled water irrigation customers) are determined by the size of irrigable area, localized weather data, and a landscape factor. The District calculates water budgets and resulting bills on a monthly basis to provide customers with timely communication about their water use.



*1 billing unit of water is equal to 100 cubic feet (HCF), or 748 gallons. *Household sizes are assumed to be 4 for Single-Family Residential Detached Homes, 3 for Single-Family Residential Attached Townhomes or Condos, and 2 for Multi-Family Residential apartments unless otherwise specified when beginning service or through the water budget modification process.

Figure 9-2. Indoor Water Budget Calculation



*1 billing unit of water is equal to 100 cubic feet (HCF), or 748 gallons.
 *0.62 converts inches to gallons per square foot.

Figure 9-3. Outdoor Water Budget Calculation

Water budgets for dedicated irrigation customers consist of an outdoor allocation based on irrigable area, evapotranspiration, and a range of landscape factors for different uses and water supplies, as shown in **Figure 9-4**.

Irrigation Budget:



Your Landscape Factor (LF):



Figure 9-4. Outdoor Water Budget Formula

Each commercial account receives a water budget based on a three-year historical rolling average of the customer's water usage for that month, as shown in **Figure 9-5**. Most commercial customers have two metered connections: a dedicated irrigation meter and a commercial indoor meter.



Commercial Customers:

Total water budget = Calculated as a three-year rolling average of daily water use for the respective billing cycle. All water used by a commercial customer within his or her calculated water budget is billed at the Tier 1 rate.

$$\left(\frac{\text{Jan 2018 Usage} \div \text{Days in Jan 2018 Bill} + \text{Jan 2017 Usage} \div \text{Days in Jan 2017 Bill} + \text{Jan 2016 Usage} \div \text{Days in Jan 2016 Bill}}{3} \right) \times \text{Days in Jan 2018 Bill}$$

Figure 9-5. Water Budget Calculation for Commercial Customers

The revenue from over budget consumption is used to fund efficiency and reliability projects (i.e., Fund 6, refer to **Figure 9-6**). The District invests the incremental rate difference between the unit price and the cost of water into a Water Efficiency Fund, which provides funding for alternative water supply planning and development, water saving rebates, water conservation programs, and demand management measures to increase the efficient use of water, and increase supply reliability.

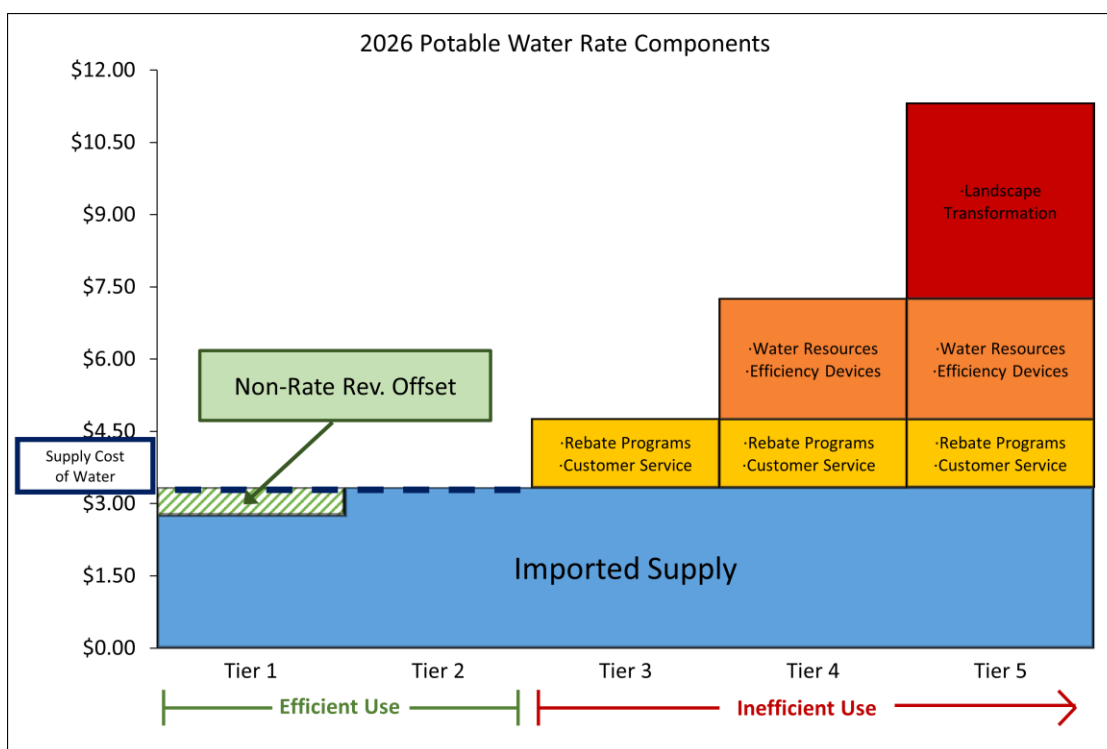


Figure 9-6. 2026 Water Rate Components

Part of the rate structure's success also stems from the District's financial planning efforts to align its fixed and variable costs with fixed and variable revenue streams, which provides a level of revenue stability during periods of drought or economic downturn. Fixed costs are recovered through a fixed service charge on the customer's monthly bill and annual property tax revenue, while variable costs are recovered through volumetric water rates on a customer's monthly bill.

Property tax and unrestricted revenues are then used to offset a portion of the in-budget volumetric rates, effectively setting in-budget rates below the marginal cost of water, to provide customers with an incentive to remain efficient. Additionally, if customers conserve, there is less need to fund new demand offset programs. Given that the rate structure is designed to increase efficiency, the expectation is that any increase in consumption is temporary.

Water Efficiency Fund

During the 2012-2016 drought crisis, the District demonstrated its innovative and resourceful approach to addressing major challenges. The District worked closely with agencies throughout the state to drive decisions and policies that will have immediate and long-term effects on the public. The Water Efficiency Fund is critical to the District's contribution and impact to the statewide discussions as the District has been recognized by the State and our peers in the water community as being a leader in demand management. Our water saving programs, partnerships with academic institutions, coordination of the statewide California Data Collaborative, and WBBRS are just some of the reasons why the District has been successful. Developing strategies and tools to further achieve efficiency and conservation while ensuring reliable service and economic health for local communities will be paramount going forward.

9.4 Public Education and Outreach

A key component of the District's demand management program is public education and outreach. The District has developed a comprehensive public education and outreach strategy to promote water use efficiency programs and resources to reduce high bills and resolve leaks. The education and outreach efforts can be broadly classified by the type of interaction between the District and customers: direct communication with customers, community presence, regional messaging, educational programs, residential and commercial water saving programs, events, and workshops.

Fix-A-Leak Workshop



Recycled Water Signage



Smart Sprinkler Timer

Communication with Customers

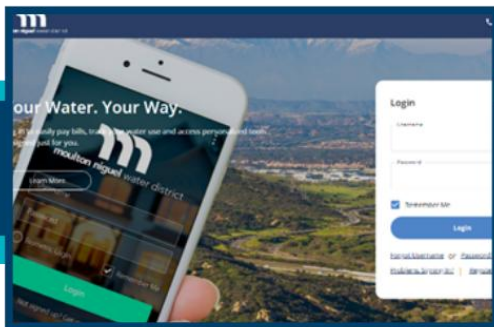
The District uses a data-driven, multichannel approach to educate customers and maximize engagement. The District's outreach evolves in response to customer feedback, campaign testing, and website, marketing, and survey data. The various marketing channels used for outreach and education include bill communications, direct mail, door hangers, website, social media, digital ads, emails, video, customer portal, and online tools and applications.

Water Bills, On-Bill Messages: The District's WBBRS calls for additional information to be communicated on the customer bills. Prominently displayed on each bill are the factors that are used to calculate the customer's budget, which includes the number of residents in the household, amount of irrigated area, and the evapotranspiration total for the billing period. The District routinely uses this feature to apprise its residents and businesses of new programs, upcoming events, and information about water rates.

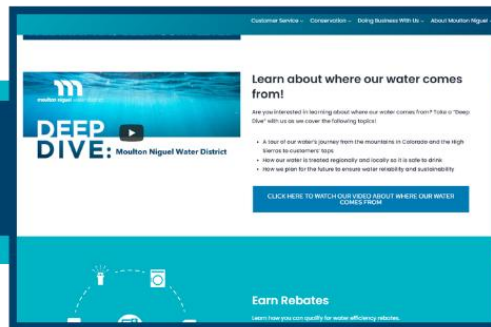
Envelope Snipes and Bill Inserts: The District utilizes the envelope snipe (folded edge of a physical letter envelope) in customer billing, to transmit important water efficiency and seasonal messages to customers. Along with the envelope snipe, the District includes one or more bill inserts each month to provide customers with detailed information on programs, events, workshops, and educational campaigns.

Online Tools and Applications: A water budget calculator was developed for customers to obtain a better understanding of the factors that are used to determine a water budget and how they are affected by the weather or the number of days in the relevant billing period. The District also developed a customer-facing application to help customers understand and quantify evapotranspiration for their specific location and developed a customer-facing rebate calculator to support the District's NatureScape Garden Design Program.

District Website



Customer Portal



Informational Videos

Door Hangers: Door hangers provide a simple and convenient way to communicate important messages to customers who are not at the property at the time of a District staff site visit. They are generally used to notify customers when movement is observed on their water meter, which could indicate a leak at the property. Door hangers also provide the current meter read and calibration results for customers requesting a water meter test.

Postcards: The District uses postcards to send residents information about upcoming events, over-budget usage, and water efficiency tools, programs, and resources. The District uses a segmentation approach to ensure that customers are only receiving postcards that are relevant to them.

Email Outreach: The District utilizes email outreach to provide customers with District news and information about upcoming events, over budget usage, and water efficiency tools, programs, and resources. The District uses customer segmentation to divide email subscribers into smaller segments based on set criteria, to ensure customers are receiving information most relevant to them. The District utilizes A/B testing and email data to determine the direction of email outreach.

Social Media: The District utilizes social media sites such as LinkedIn, Instagram, Facebook, X, YouTube, and Nextdoor. As part of the outreach, the District uses tools to place digital ads promoting rebates and water conservation on Facebook, GoogleAds, and LinkedIn. In addition, rebates are advertised in local newspapers, social media sites, and at community events and workshops.

Community Presence

To develop a general awareness about efficient water use and get residents interested in the services and benefits that the District provides, the District increased its presence in the communities it serves.

Newsletters and Press Releases: Monthly newsletters provide customers with timely information about the District, including details on events, grant awards, capital projects, water efficiency, and special milestones. These newsletters were emailed to customers in a digital format and as bill inserts included in every customer bill. The District issues press releases on District news, community events, educational workshops, as well as information on conservation tips.

Information Booths: The District is an active participant in local community events within the service area. At these events, the District provides informational items about the District, its water sources, and water saving tips. The District typically staffs an average of 20 information booths per year, reaching thousands of customers annually.

Speakers Bureau: Through the District's Speakers Bureau program, staff provide presentations to homeowner associations, city councils, chambers of commerce, local realtor associations, community groups, and others upon request. Topics include: WBBRS, water supply, water quality, infrastructure, data & innovation, rebates, and water efficiency resources.

Fix-A-Leak Campaign and Workshops



H2O for HOAs



NatureScape Garden Tour

Educational Programs

The District recognizes the value of teaching the community about the importance of water and the need for everyone to use it wisely. Sharing information through a variety of educational programs allows for students to learn that water conservation is a California way of life.

- **Project WET (Water Education Today)**
- **Professional Landscaper Training Classes**
- **Future Leaders of Water (FLOW) Initiative**
- **Water Energy Education Alliance**
- **MWDOC School Education Programs**
- **Children's Water Education Festival**
- **Sustainable Landscaping Classes**
- **Irrigation Efficiency Workshops**
- **Online Education Center**
- **Watershed Field Trips**



9.5 Water Savings Programs and Customer Support

Residential Water Savings Programs

NatureScape Garden Design Program:

NatureScape helps customers replace turf with California native, watershed-friendly landscapes. Participants receive a free pre-qualification assessment, 50% off design fees, and access to designers and contractors to support the transformation.

Leak Alerts:

MNWD's leak alerts help customers by detecting unusual continuous water use in near real time, allowing them to fix problems before they lead to high water bills or property damage. This early insight, powered by smart meter hourly data, gives customers the ability to monitor their usage and respond quickly to potential leaks.

Smart Sprinkler Timer Direct Installation Program:

Since 2017, the District has offered up to two free smart sprinkler timers and discounted installation to improve outdoor water efficiency. Over 3,300 controllers have been installed, saving more than 73.7 million gallons annually.

Southern California Gas Company Energy Savings Assistance Program (ESAP) Partnership:

The District partners with SoCalGas to provide income-qualified customers with free water and energy-saving devices, including high-efficiency washers, showerheads, and faucet aerators.

Home Saving Surveys:

Residential customers can request free Home Saving Surveys to troubleshoot high bills, leaks, and irrigation issues. From FY 2020 to FY 2025, the District conducted over 1,151 Surveys.

Fix-A-Leak Campaign:

Each March, the District participates in EPA's Fix-A-Leak Campaign, offering free toilet leak tests and educational resources. Year-round customers may access tools like dye tabs and educational videos to help prevent water waste.





Commercial Water Savings Programs

Commercial Surveys

The District provides free indoor and landscape water-use surveys for commercial businesses to identify leaks, evaluate device efficiency, and offer education on water-saving practices. Participants receive a detailed report with usage history, site analysis, recommended rebates, and helpful resources.

Professional Landscape Irrigator Training

The District offers free Qualified Water Efficient Landscaper (QWEL) training, an EPA WaterSense-labeled certification program for professionals focused on sustainable landscaping, soil health, and irrigation auditing.

H2O Pro Program

H2O Pro offers HOAs and commercial landscapes free site and landscape assessments, a comprehensive efficiency report, recommended improvements, and a follow-up strategy meeting. The program now has 38 HOAs actively participating.

SDG&E Business Energy Solutions Program Partnership:

Customers with commercial kitchens are eligible for instant rebates on select water- and energy-saving devices, including pre-rinse spray valves, faucet aerators, ice machines, and steam cookers. They also receive complimentary assessments and professional installation.

Programs to Assess and Manage Distribution System Real Losses

The District completes a thorough audit on the billing and tracking of water use and water loss each fiscal year. In accordance with the SB 555, the District has completed the water audit and water balance using the AWWA software for Fiscal Year 2020 through Fiscal Year 2025. Staff have completed training in the AWWA water audit methodology and the component analysis process. Since May 2023, information related to leaks has been documented using MNWD'S CMMS software, NEXGEN. This has improved MNWD's methods of capturing all kinds of operational water use as well as refined the actual water loss calculation. Operational water use may include line-flushing and hydrant testing, among others. For example, a new process was developed to verify leaks and track repairs:

- 1) A potential leak is identified.
- 2) A work order to verify and, if needed, repair the leak is created.
- 3) A Water Loss Form is generated.
- 4) An Initial Investigation is performed to determine the extent of the leak.
- 5) Once the repair is underway and the leak is isolated, the Resolution/Repair zone of the form is completed with the verified details of the leak.

This information gathering provides MNWD staff with details such as if the leak were caused by an accident, flow measurements, when staff was made aware of the leak, when it was isolated, what type of leak, and how it was identified. Once the details are filled out in the investigation form, a Water Loss Report is prepared to calculate the total water loss. The District prioritizes identifying and reducing water loss through audits, AMI data, piloting new technology (e.g., satellite-based flyover data, AI predictions of pipe failures, and machine learning), as well as developing a proactive leak detection and survey team.

Water Conservation Program Coordination and Staffing Support

The District created the Water Efficiency Department in 2010. The Water Efficiency Department is responsible for a variety of tasks related to conservation and community outreach, including, but not limited to:

- Customer service for high bills and concerns for increased consumption;
- Outreach to customers with unusually high usage and potential leak alerts;
- Education about water budget-based rates;
- Hosting workshops for landscaping and irrigation best practices;
- Applying budget modifications for changes to household members, irrigated area measurements, and other special circumstances;
- Conducting home and commercial water surveys;
- Performing site inspections;
- Attending community and HOA events;
- Distributing conservation supplies to customers;
- Participating in regional water use efficiency meetings at MWDOC and MWD;
- Advocating at regional, state, and federal levels for cost-effective water efficiency programs and policies; and
- Tracking success of water uses efficiency fund and rebate programs.

The MNWD Water Efficiency Department continues to encourage water efficiency and design new programs to address ongoing demand management efforts. The following section describes additional measures used to implement these MNWD efficiency programs.

9.6 Other Demand Management Measures

District staff work closely with MWD OC, the regional wholesaler, to develop and implement District and regional water use efficiency programs. The District offers a wide variety of rebates to customers designed to promote water conservation. The District provides supplemental funding for devices and pre- and post-inspections for turf removal rebates.

Residential Rebates – Indoor

The District provides two indoor rebates for residents, as described further below. **Table 9-2** summarizes each rebate program, the reimbursement cost amount.

High Efficiency Clothes Washers

Almost 15 percent of water used inside the home is for laundry. New high efficiency clothes washers use up to 55 percent less water than older models. Switching to a high efficiency clothes washer may provide a water savings of 4,800 gallons per year.

Premium High Efficiency Toilets

Premium high efficiency toilets use almost 20 percent less water than the WaterSense standard and flush the same amount of waste just as effectively.

Flow Monitoring Devices

Flow Monitor devices monitor your home's water use. Features may include real-time alerts, leak detection, and automatic shutoff. These devices may qualify for discounts on your property insurance premiums.



Residential Rebates – Outdoor

Weather-Based Smart Sprinkler Controller

Weather-based smart sprinkler controllers allow for a more accurate, customized irrigation setting by automatically adjusting the watering schedule and amount of water in response to changing weather conditions. Not only does this save water by

reducing unnecessary watering, but it also allows for customization of irrigation schedules to meet the landscape's specific plant and climate needs.

Soil Moisture Sensor Controller

Soil moisture sensor controllers are placed below ground in the root zones of lawns and landscapes to determine if and how long to water. They are available as stand-alone controllers or add-on devices to existing controllers. They have been shown to reduce outdoor water use by as much as 70 percent without sacrificing the quality or health of landscape.

Rain Barrels and Cisterns

Rain barrels and cisterns allow for the capture of rainwater that falls for reuse on the customer's landscape. Plants and microbes prefer rainwater because it is naturally "soft" and free of chlorine, fluoride, and other constituents. Rain barrels help reduce ocean water pollution by preventing rain from carrying fertilizers, pet waste, and other harmful debris into the ocean.

Rotating Sprinkler Nozzles

Rotating nozzles provide direct, uniform water distribution to plants, eliminating wasteful runoff. They use a lower flow rate than traditional spray nozzles and can help you reduce your outdoor water use by up to 30 percent.

Turf Replacement

Turf grass is one of the most water-intensive plants in a customer's landscape. To qualify for a rebate, a pre-inspection is required to determine the amount of turf to be removed, as well as confirm that it is alive and irrigated. A post-inspection is also required to verify the total square feet of turf removed in order to calculate the rebate amount. As of 2025, nearly 7,000,000 square feet of turf has been removed in the District's service area, making us a program leader in Orange County.

NatureScape Garden Design Program

The NatureScape Garden Design Program offers residents a professional landscape design for a California native garden. Customers first attend a MNWD sponsored landscape workshop, then receive a free landscape consultation and evaluation, followed by a custom landscape design. MNWD covers 50% of the design cost.

Table 9- 2. Residential Rebates Summary

Residential Rebates	
Program	Current Rebate Level
Indoor	
High Efficiency Clothes Washers	Up to \$285 per washer
High Efficiency Toilets	Up to \$40 per toilet
Flow Monitoring Devices	Up to \$100 per device
Outdoor	
Rotating Sprinkler Nozzles	Up to \$6 per nozzle
Rain Barrels	Up to \$35 per barrel
Cisterns	Start at \$250
Weather-Based Smart Sprinkler Timer	Up to \$230 per controller
Soil Moisture Sensor Controller	Up to \$230 per Controller
Turf Replacement	Up to \$3 per sq.ft.



Commercial Rebates - Indoor

The District has several indoor commercial rebates available, as described below. **Table 9-3** summarizes each rebate program and the reimbursement amount.

Premium High Efficiency Toilets

Replacing a 3.5 gallon per flush (gpf) toilet with a WaterSense 1.28 gpf toilet may save an average of 10,000 gallons per year per business. Premium 1.06 gpf high efficiency toilets use almost 20 percent less water than the WaterSense standard and flush the same amount of waste just as effectively.

Ultra-Low and Zero Water Urinals

Ultra-low water urinals provide effective, low-maintenance flushing in public restrooms while reducing water consumption by as much as 88 percent. Zero water urinals are an improvement over traditional urinals in both maintenance and hygiene, saving an average of 45,000 gallons of water per year.

Plumbing Flow Control Valve

Flow Control Valves are designed to maintain water pressure while reducing water flow in faucets and showers by up to 60 percent.

Connectionless Food Steamers

Restaurants often use food steamers to maintain warm food. New water-efficient connectionless (pressure-less) food steamers, which have no water line or sewer discharge line have been developed. Based on a study by the Food Service Technology Center, connectionless food steamers save an average of 81,500 gallons per year with an estimated 10-year life span.

Air-Cooled Ice Machines

Air-cooled ice machines use less energy and water to make ice quickly and efficiently. To qualify for a rebate, air-cooled ice machines must replace older existing water-cooled ice machines. Air-cooled ice machines use 15-25 gallons of water per 100 pounds of ice and do not use water to cool the machine, thereby achieving significant water savings.

Dry Vacuum Pumps

Vacuum pumps are used in medical applications for drying, distilling, evaporating, degasifying, freezing, suction, and laboratory analysis. Liquid ring vacuum pumps use large amounts of water as a liquid seal to create the vacuum. Converting to dry vacuum pumps will reduce water and sewer expenses. Dry vacuum pumps can create an airtight seal without the use of water by utilizing parts machined within extremely close tolerances.

Laminar Flow Restrictors

Laminar flow restrictors placed on faucets do not draw air into the water stream and produce a non-aerated clear stream of water which inhibits bacterial growth and transmission. Reduced flow rates can reduce water and energy costs. Retrofitting an existing faucet with a laminar flow restrictor can save up to 7,500 gallons per device. Laminar flow restrictors eligible for the rebate are to be installed in hospitals, urgent care, and other health care related facilities.

Food Defrosting Equipment

A food defrosting device can thaw frozen foods safely and effectively by recirculating water as opposed to the common practice of thawing food under continuously running water, saving water, time, and money.

Commercial Rebates – Outdoor

The District has several outdoor commercial rebates available to customers, as described further below. **Table 9-3** summarizes each rebate program and the reimbursement cost amount. The District's rebate programs are available on the District's website.

Rotating Sprinkler Nozzles

Retrofitting existing pop-up spray heads with rotating nozzles can save up to 6,600 gallons per nozzle over a five-year period.

Large Rotary Spray Nozzles

High efficiency nozzle retrofits for large rotary sprinklers replace standard plastic nozzles with durable metal nozzles. These replacement nozzles are resistant to wear and provide a high uniformity of water distribution. Retrofitting existing plastic large rotary sprinkler heads with metal high efficiency nozzles could result in an annual water savings of up to 6.5 percent. High efficiency nozzle retrofits provide healthier, greener turf and improved distribution and uniformity with lower water and energy costs.

Cisterns

Cisterns help customers capture the rain that falls and reuse it later to water the landscape or for other uses.

Weather Based Smart Sprinkler Controller

Weather-based smart sprinkler controllers allow for more accurate, customized irrigation programming by automatically adjusting the schedule and amount of water in response to changing weather conditions. Smart timers use programed information about the plants, soil, and weather conditions to optimize watering year-round, saving water by reducing unnecessary use. The estimated water savings per year for 2,000 sq. ft. of irrigated area is approximately 17,204 gallons.

Soil Moisture Sensor Controllers

Soil moisture sensor controllers are placed below ground in the root zones of lawns and landscapes to determine if and how long to water. They are available as stand-alone controllers or add-on devices to existing controllers. They have been shown to reduce outdoor water use by as much as 70 percent without sacrificing the quality or health of the landscape.

Turf Replacement

Turf grass is one of the most water-intensive plants in a customer's landscape. By removing 500 sq. ft. of turf, an estimated 9,000 gallons of water is saved per year. To qualify for a rebate, a pre-inspection is required to determine the amount of turf being removed, as well as to confirm that it is alive and irrigated. A post-inspection is also a requirement to verify the total square feet of turf removed to calculate the rebate amount.

Drip Irrigation

Drip irrigation allows water to slowly drip to the roots of plants, either onto the soil surface or directly into the root zone through a network of valves, pipes, tubing, and emitters. Traditional overhead sprinklers have a water efficiency of 70 percent or lower, while drip irrigation is 90 percent efficient. The installed drip irrigation equipment must be listed on the eligible products list and a minimum of 250 square feet of irrigated area must be converted.

In-Stem Flow Regulators

In-stem flow regulators control water flow in irrigation systems at the sprinkler head. They are recommended for parks, schools, office complexes, golf courses, nurseries, and other commercial irrigation applications. Retrofitting existing pop-up spray heads with in-stem flow regulators can save up to 1,000 gallons per device.

Cooling Tower Conductivity and pH Controllers

Automated monitoring and control are the keys to maintaining cooling system efficiency. By accurately transmitting information to the valves that control the amount of blow down (water drained from the cooling tower reservoir) and subsequent makeup water, a conductivity controller can dramatically reduce operating expenses. Annual water savings with a new cooling tower conductivity controller can be as much as 800,000 gallons.

Irrigation Flow Sensor

A smart flow sensor measures the rate of water flow in the irrigation system, providing real-time data on water usage. These devices monitor water usage and can help identify leaks or clogged sprinklers.

Irrigation Master Valve

An irrigation master valve serves as the central control valve that manages the flow of water to the entire irrigation system. It is operated by an irrigation controller and can protect the irrigation system by halting water flow in case of issues with malfunctioning valves or sprinklers.

Irrigation Hydrometer

A hydrometer is a combination of master valve, flow sensor, and water meter all-in-one, and provide all the same benefits. These devices are ideal for systems and properties with limited space.

Table 9- 3. Commercial Rebates Summary

Commercial Rebates	
Program	Current Rebate Level
Indoor	
Premium High Efficiency Toilets	Up to \$40 per toilet
Ultra Low & Zero Water Urinals	Up to \$200 per urinal
Plumbing Flow Control Valve	Up to \$5 per valve
Connectionless Food Steamers	Up to \$985 per compartment
Air-Cooled Ice Machine	Up to \$1,750
Dry Vacuum Pump	Up to \$125 per 0.5 HP
Laminar Flow Restrictors	Up to \$10 per Restrictor
Food Defrosting Equipment	Up to \$800 per Device
Outdoor	
Rotating Sprinkler Nozzles	Up to \$6 per nozzle
Large Rotary Spray Nozzles	Up to \$28 per set
Cisterns	Starts at \$250
Weather-Based Smart Sprinkler Timer	Up to \$75 per active station
Soil Moisture Sensor Controller	Up to \$75 per active station
Turf Removal	Up to \$4 per sq.ft.
Drip Irrigation	Up to \$0.70 per sq ft.
In-Stem Flow Regulator	Up to 1 per Regulator
Cooling Tower Conductivity and pH Controllers	Up to \$1,225 per Conductivity Controller Up to \$2,750 per pH Controller
Irrigation Flow Sensor	Up to \$500 per device
Irrigation Master Valve	Up to \$300 per device
Irrigation Hydrometer	Up to \$800 per device

9.7 Implementation Efforts

The District is committed to achieving even greater water savings and pursuing innovative solutions throughout its service area.



Industry Trainings and Workshops

Through industry-focused trainings and workshops, MNWD equips local plumbers with expertise in leak detection, water-saving technologies, and rebate program navigation. Master Valve and Flow Sensor Trainings support landscape and irrigation professionals by strengthening professional skills and promoting regional water efficiency. Additionally, MNWD's Water Efficiency Landscape Dual Certification Program (WELDCP) offers landscape professionals the opportunity to earn two nationally recognized EPA WaterSense certifications.

Innovation

MNWD continues to advance digital transformation through use of advanced technology, which enables more precise leak detection, improved emergency response, and better optimization of water resources. MNWD is also a core partner in launching the nation's first online Artificial Intelligence (AI) course for water professionals. MNWD is driving innovation by embracing technology to modernize operations, strengthening the regional workforce, and enhancing long-term water resiliency.

Ongoing Conservation Programs

MNWD expects to continue implementing existing conservation programs as well as developing new initiatives. Efficiency programs are a key strategy for encouraging long-term water savings. These programs reinforce MNWD's commitment to responsible resource management and empower the community to adopt lasting conservation practices.

9.8 Urban Water Use Objective

The demand management measures described throughout this section will be used to help meet the District's Urban Water Use Objective. As necessary, the District may modify the formula and standards for developing water budgets (refer to **Section 9.3** above) to reflect best practices in water efficiency. The District will continue to develop innovative programs to help customers use water wisely and reduce water waste.

Section 10: Urban Water Management Plan Adoption and Submittal Process

This section provides the information required by the UWMP Act related to adoption of the UWMP and WSCP and external coordination and outreach activities conducted by MNWD as required by the California Water Code.

10.1 Inclusion of all 2025 Data

Data provided in this plan reflects fiscal years beginning July 1. Data utilized is current through the end of the last full fiscal year – June 30, 2025. This 2025 UWMP serves as an update to MWND’s 2020 UWMP. As required by California Water Code Section 10631 (h), MWDOC provided its member agencies with information that quantified water availability to meet their projected demands over the next 25 years. Based on the projections of retail demand and local supply development provided by MWDOC’s member agencies and the imported supply availability described in MWD’s 2025 UWMP, MNWD incorporated all available data into this 2025 UWMP.

10.2 Notice of Public Hearing

Recognizing that close coordination among other relevant public agencies is key to the success of its UWMP and WSCP, MNWD worked closely with many other entities to develop and update these planning documents, including but not limited to other water suppliers that share a common source, water management agencies, and other relevant public agencies to the extent practicable. MNWD also encouraged public involvement by holding two public hearings for stakeholders to learn and ask questions about their water supply and all related aspects of the WSCP and the 2025 UWMP, as further discussed below. MNWD’s notifications are described below.

Notice to Cities and County

MNWD notified in writing all cities and the County within its service area at least 60 days prior to the public hearings for the 2025 UWMP. As shown in **Table 10-1**, MNWD sent a Letter of Notification to the County of Orange and all cities within the District’s service area on January 29, 2026, to state that it was in the process of preparing an updated WSCP and UWMP. These agencies were also notified of the date, time, and location of the respective public hearings for the WSCP and 2025 UWMP. Furthermore, prior to each of the hearings and adoption of the WSCP and then the UWMP, a copy of the WSCP and UWMP were made available for public review. As discussed below, MNWD also ensured the notice of the

time and place of the respective public hearings were published within its service area in accordance with the requirements of Section 6066 of the Government Code.

Table 10- 1. DWR Submittal, Notification to Cities, Water Districts, and County

Submittal Table 10 1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City/District Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
City of Aliso Viejo	Yes	Yes
City of Dana Point	Yes	Yes
City of Laguna Hills	Yes	Yes
City of Laguna Niguel	Yes	Yes
City of San Juan Capistrano	Yes	Yes
City of Mission Viejo	Yes	Yes
El Toro Water District	Yes	Yes
Laguna Beach County Water District	Yes	Yes
South Coast Water District	Yes	Yes
Santa Margarita Water District	Yes	Yes
Municipal Water District of Orange County	Yes	Yes
County Name	60 Day Notice	Notice of Public Hearing
Orange County	Yes	Yes
NOTES: Notices were also sent to neighboring water districts and agencies, as listed above.		

Notice to the Public

MNWD encouraged the involvement of diverse social, cultural, and economic constituents of the population and community within its service area prior to and during preparation of the 2025 UWMP, by posting the draft UWMP on the MNWD website and announcing its preparation and availability at MNWD Board meetings. Hard copies of the draft documents were also made available at District headquarters, upon request.

MNWD also encouraged public involvement by holding a public hearing for stakeholders to learn and ask questions about their water supply and all related aspects of the WSCP and 2025 UWMP. Copies of these notices, including the time and location of the public hearings on the WSCP and UWMP, are included in **Appendix G**, and were published in the Orange County Register newspaper once a week for two consecutive weeks with at least five days between each notice for both the WSCP and UWMP.

Newspaper notices for the WSCP and UWMP were published in the Orange County Register on May 17 and May 24, 2026. Copies of the published notices are included in **Appendix G**.

10.3 Public Hearing(s) and Adoption

Public hearing(s) notifications were sent to cities and the County list in **Table 10-1**. The hearings provided an opportunity for all residents, businesses, and other stakeholders in the District's service area to learn and ask questions about their water supply and the key elements of the District's WSCP and 2025 UWMP.

- The WSCP public hearing was conducted on June 11, 2026, at 6:00 p.m. during a regularly scheduled meeting of the MNWD Board of Directors at MNWD's Headquarters in Laguna Hills.
- The UWMP public hearing was conducted on June 11, 2026, at 6:00 p.m. during a regularly scheduled meeting of the MNWD Board of Directors at MNWD's Headquarters in Laguna Hills.

MNWD ensured that during the public hearings community members and interested stakeholders were provided with an opportunity to share input on the District's WSCP and UWMP. The District also considered the economic impacts of the WSCP and UWMP. A copy of the draft WSCP and 2025 UWMP was made available for public inspection on MNWD's website on April 9, more than 30 days prior to the respective public hearings. The Board of Directors President then opened each of the respective Public Hearings, before considering the documents for Board Adoption. There were no public comments.

- The WSCP was adopted by the Board of Directors on June 11, 2026. A copy of the ordinance adopting the WSCP is provided in **Appendix C**.
- The UWMP was adopted by the Board of Directors on June 11, 2026. A copy of the resolution adopting the UWMP is provided in **Appendix H**.

A staff report and presentation for both the WSCP and 2025 UWMP reviewed the information gathering process, the data obtained, and the conclusions that served as the basis of the Draft WSCP and 2025 UWMP. As required by California Water Code, MNWD summarized Water Conservation Programs implemented to date, and compared the implementation to those as planned in this UWMP.

10.4 Urban Water Management Plan Submittal

Pursuant to Water Code Section 10621(d), within 30 days of adoption and by July 1, 2026, MNWD will submit the 2025 UWMP to the DWR. The District's adopted 2025 UWMP and related data tables will be provided electronically to DWR through the WUEdata online submittal tool that DWR developed.

MNWD completed the DWR UWMP checklist to confirm that all required elements are included in the 2025 UWMP, see **Appendix A**. In addition, all DWR standard tables are attached for reference in **Appendix B**. Electronic copies of the 2025 UWMP were submitted to the California State Library, MWDOC, City of Laguna Niguel, City of Aliso Viejo, City of Laguna Hills, City of Mission Viejo, City of Dana Point, City of San Juan Capistrano, County of Orange, and other entities in accordance with the UWMP Act, no later than 30 days after adoption.

10.5 Public Availability

MNWD will make the Board-adopted 2025 UWMP and WSCP available for public review on its website (<https://www.mnwd.com/reports-publications/>) no later than 30 days after filing the documents with DWR.

Appendix A

DWR UWMP Checklist



2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and overview	n/a	Section 1, Section 4, Section 9, and Appendix C
x	Chapter 1	10630.5	Each plan shall include a simple description of the Supplier’s plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a Supplier may also choose to include a simple description at the beginning of each chapter.	Plan preparation	n/a	Executive Summary, Section 1, and Section 2
x	Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	Plan preparation	n/a	Section 2.1
x	Section 2.5	10644	Supplier shall report the Public Water Systems number, volume of delivered water, and number of connections that are included in this UWMP.	Plan preparation	2-1	Section 2.1
x	Section 2.5	10644	Supplier shall report if this UWMP is an individual UWMP and whether the Supplier belongs to a regional UWMP or regional alliance.	Plan preparation	2-2	Section 2.1
x	Section 2.5	10644	Supplier shall report whether the data is in fiscal or calendar years and the units of measure used for reporting water volumes.	Plan preparation	2-3	Section 2.2
x	Section 2.4	10642	Provide supporting documentation that the Supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan preparation	n/a	Section 2, Section 8, Section 10, Appendix C, and Appendix F
x	Section 2.4.2	10620(d)(3)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other Suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan preparation	n/a	Section 2.3, Section 10, and Appendix F
x	Section 2.4.1	10631(h)	Retail Suppliers will include documentation that they have provided their Wholesale Supplier(s)—if any—with water use projections from that source.	Plan preparation	2-4 R	Section 2.3
n/a	Section 2.4.1	10631(h)	Wholesale Suppliers will provide their Suppliers with identification and quantification of the existing and planned sources of water available from the Wholesale Supplier to the Supplier during various water year types.	Plan preparation	2-4 W	N/A
x	Chapter 3.0	10631(a)	Describe the Supplier service area.	System description	n/a	Section 3
x	Section 3.3	10631(a)	Describe the climate of the Supplier’s service area.	System description	n/a	Section 3.2
x	Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	System description	3-1	Section 3.2
x	Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier’s water management planning.	System description	n/a	Section 3.2
x	Section 3.5	10631(a)	Describe the land uses within the service area... include the current and projected land uses within the existing or anticipated service area affecting the Supplier’s water management planning. Describe the land uses within the service area.	System description and baselines	n/a	Section 3.2
x	Sections 4.2.3 and 4.2.4	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System water use	4-1 and 4-2	Section 4.2
x	Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	System water use	4-5	Section 4.5
x	Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	System water use	4-6	Section 4.5
x	Section 4.2.5.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the Supplier.	System water use	4-3	Section 4.3, Section 4.4
x	Section 4.2.5.3	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans, and other policies or laws.	System water use	4-3	Section 4.3, Appendix C

2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System water use	4-3	Section 4.3, Appendix C
x	Section 4.2.5.3	10631(d)(4)(B)(ii)	To the extent that a Supplier reports the information described in subparagraph (A), an urban water Supplier shall... Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.	System water use	4-3	Section 4.3, Appendix C
x	Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System water use	n/a	Section 7: Constraints on Water Sources, Water Use Comparison
n/a	Section 5.1	10608.36	Wholesale Suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their Retail Suppliers achieve targeted water use reductions.	Baselines and targets	n/a	Section 5, Section 9, and Appendix C
x	Section 5.2	10608.40	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	Baselines and targets	5-1	Section 5
x	Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System supplies	n/a	Section 6
x	Sections 6.1 and 6.2	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, including changes in supply due to climate change.	System supplies	n/a	Section 7
x	Section 6.2.2	10631(b)(4)(C)	Indicate whether groundwater is an existing or planned source of water available to the Supplier. If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	Water supplies and recycled water	6-1	Section 6.2
x	Section 6.2.2	10631(b)(4)(A)	Indicate whether a groundwater sustainability plan or groundwater management plan has been adopted by the Supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System supplies	n/a	Section 6.2
x	Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System supplies	n/a	Section 6.2
x	Section 6.2.2	10631(b)(4)(B)	Indicate if the basin has been adjudicated and include a copy of the court order or decree and a description of the amount of water the Supplier has the legal right to pump.	System supplies	n/a	Section 6.2
x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... (include) information as to whether DWR has identified the basin as a high- or medium-priority basin in the most current official departmental bulletin...	Water supplies and recycled water	n/a	Section 6.2, N/A
x	Section 6.2.2	10631(b)(4)(B)	For unadjudicated basins... describe efforts by the Supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	Water supplies and recycled water	n/a	Section 6.2, N/A
x	Section 6.2.2.	10631(b)(4)(C)	If groundwater is identified as an existing or planned source of water... (include) a detailed description and analysis of the location, amount and sufficiency of groundwater pumped by the Supplier for the past five years.	System supplies	n/a	Section 6.2
x	Section 6.2.2	10631(b)(4)(D)	Provide a detailed description and analysis of the amount and location of groundwater that is projected to be pumped.	System supplies	6-9	Section 6.2
x	Section 6.1	10631(b)	Identify and quantify the existing and planned sources of water available for 2025, 2030, 2035, 2040, 2045 and optionally 2050.	System supplies	6-8 and 6-9	Section 6, Section 6.9
x	Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	System supplies	n/a	Section 6.7, Section 6.10

2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the Supplier’s service area with quantified amount of collection and treatment and the disposal methods.	System supplies (recycled water)	6-2	Section 6.5
x	Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System supplies (recycled water)	6-3	Section 6, Section 6.5, Section 6.8, Section 6.9
x	Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	System supplies (recycled water)	6-4	Section 6.5, Section 6.9
x	Section 6.2.5	10633(d)	Describe and quantify the potential uses of recycled water and provide a determination of the technical and economic feasibility of those uses.	System supplies (recycled water)	6-4	Section 6, Section 6.5, Section 6.8, Section 6.9
x	Section 6.2.5	10633(e)	Describe the projected use of recycled water within the Supplier's service area at the end of 5, 10, 15, and 20 years, and describe the actual use of recycled water in comparison to uses previously projected.	System supplies (recycled water)	6-4 and 6-5	Section 6.5
x	Section 6.2.5	10633(f)	Describe the actions that may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System supplies (recycled water)	6-6	Section 6, Section 6.5, Section 6.8, Section 6.9
x	Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	System supplies (recycled water)	n/a	Section 6, Section 6.5, Section 6.8, Section 6.9
x	Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System supplies	6-7	Section 6.6, Section 6.9
x	Section 6.2.10	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water Supplier to address water supply reliability in average, single-dry, and for a period of drought lasting five consecutive water years.	System supplies	6-7	Section 6.9
x	Section 6.3 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a Supplier can readily obtain.	System suppliers, energy intensity	O-1A, O-1B, O-1C, and O-2	Section 6.11
x	Section 7.1	10634	Provide information on the quality of existing sources of water available to the Supplier and the manner in which water quality affects water management strategies and supply reliability.	Water supply reliability assessment	n/a	Section 7, Section 7.1
x	Section 7.2	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the Supplier with the total projected water use over the next 20 years.	Water supply reliability assessment	7-2, 7-3, and 7-4	Section 7, Section 7.2
x	Section 7.2.3	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water supply reliability assessment	n/a	Section 7, Section 7-2
x	Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water supply reliability assessment	n/a	Section 7, Section 7.3
x	Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive years.	Water supply reliability assessment	n/a	Section 7, Section 7.3
x	Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water supply reliability assessment	n/a	Section 7, Section 7.3
x	Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the Supplier with the total projected water use for the drought period.	Water supply reliability assessment	7-5	Section 7, Section 7.3
x	Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water supply reliability assessment	n/a	Section 7, Section 7.3
x	Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water shortage contingency planning	n/a	Section 8, Appendix C

2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	Water shortage contingency planning	n/a	Section 7, Section 8, Appendix C
x	Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the Supplier will use each year to determine its water reliability.	Water shortage contingency planning	n/a	Section 7, Section 8, Appendix C (Chapter 3)
x	Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the Supplier’s water reliability for the current year and one dry year pursuant to factors in the code.	Water shortage contingency planning	n/a	Section 7, Section 8, Appendix C
x	Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10%, 20%, 30%, 40%, 50% shortage, and greater than 50% shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.3	10632(a)(3)(B)	Suppliers with an existing WSCP that uses different water shortage levels must cross reference their categories with the six standard categories.	Water shortage contingency planning	8-1	N/A, Section 8, Appendix C (MNWD uses the six standard levels.)
x	Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water shortage contingency planning	8-2	Section 8.3, Appendix C
x	Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water shortage contingency planning	8-3	Section 8.3, Appendix C
x	Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water shortage contingency planning	8-2	Section 8.3, Appendix C
x	Section 8.4	10632(a)(4)(D)	Specify additional mandatory prohibitions against specific water use practices that are in addition to State-mandated prohibitions are appropriate to local conditions.	Water shortage contingency planning	Table 8-3	Section 8.3, Appendix C
x	Section 8.4	10632(a)(4)(E)	Estimate the extent to which the gap between supplies and demand will be reduced by implementation of the action.	Water shortage contingency planning	8-2 and 8-3	Section 8.3, Section 9, Appendix C
x	Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	Water shortage contingency plan	n/a	Section 8.3, Appendix C
x	Section 8.5	10632(a)(5)(A)	Suppliers must describe that they will inform customers, the public and others regarding any current or predicted water shortages.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.5	10632(a)(5)(B), 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. <i>Water Shortage Emergencies</i> .	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.7	10632(a)(7)(C)	Provide a statement that the Supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Section 8, Appendix C
x	Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water shortage contingency planning	n/a	Section 8, Appendix C

2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, <i>Excessive Residential Water Use During Drought</i> .	Water shortage contingency planning	n/a	Appendix C (Chapter 7, Chapter 8, and Chapter 9)
x	Section 8.9	10632(a)(9)	Retail Suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data are collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water shortage contingency planning	n/a	Appendix C (Chapter 10)
x	Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the WSCP to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water shortage contingency planning	n/a	Appendix C (Chapter 11)
x	Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water shortage contingency planning	n/a	Appendix C (Chapter 12)
x	Section 8.12	10632(c)	Make available the WSCP to customers and any city or county where it provides water within 30 days after adoption of the plan.	Water shortage contingency planning	n/a	Appendix C (Chapter 13)
x	Sections 9.1	10631(e)(1)	Retail Suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand management measures	n/a	Section 9
n/a	Sections 9.2	10631(e)(2)	Wholesale Suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and Supplier assistance program.	Demand management measures	n/a	N/A
x	Chapter 10	10608.26(a)	Retail Suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan adoption, submittal, and implementation	n/a	Section 10
x	Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the Supplier provides water that the Supplier will be reviewing the UWMP and considering amendments or changes to the plan.	Plan adoption, submittal, and implementation	10-1	Section 10, Appendix F
x	Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 2026.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix G
x	Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the Supplier made the UWMP and WSCP available for public inspection, published notice of the public hearing, and held a public hearing about the UWMP and WSCP.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix F
x	Section 10.2.2	10642	The Supplier is to provide the time and place of the hearing to any city or county within which the Supplier provides water.	Plan adoption, submittal, and implementation	10-1	Section 10, Appendix F
x	Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix B, Appendix C, Appendix F, Appendix G
x	Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	Plan adoption, submittal, and implementation	n/a	Section 10
x	Section 10.4	10644(a)(1)	Provide supporting documentation that the Supplier has submitted their UWMP to any city or county within which the Supplier provides water no later than 30 days after adoption.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix F

2025 UWMP Checklist

Retail (x = required)	2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	Relevant Submittal Table	2025 UWMP Location
x	Sections 10.4.1 and 10.4.2	10644(a)(2)	The UWMP, or amendments to the UWMP, submitted to DWR shall be submitted electronically.	Plan adoption, submittal, and implementation	n/a	Section 10
x	Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix C
x	Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its UWMP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 10
x	Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its WSCP with DWR, the Supplier has or will make the plan available for public review during normal business hours.	Plan adoption, submittal, and implementation	n/a	Section 10, Appendix C
x	Section 10.6	10621(c)	If Supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan adoption, submittal, and implementation	n/a	Section 10

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Appendix B

DWR Submittal Tables



DWR 2025 Submittal Tables

Submittal Table 2-1 Retail: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2025	Volume of Water Supplied 2025 (AF)
Add additional rows as needed			
CA 3010073	Moulton Niguel Water District	54,089	22,235
Total		54,089	22,235
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES: Units of measure are in AF. Volume of water includes potable water connections. There are an additional 1,494 recycled water connections with 5,665 AF of water use in FY24-25.			

Submittal Table 2-2: Plan Identification		
Select One	Type of Plan	Name of Regional Alliance or RUWMP (Drop Down List)
☒	Individual UWMP	
	If Water Supplier is also a member of a SB X7-7 Regional Alliance, select name from the drop-down.	Orange County 20x2020 Regional Alliance
☐	Regional Urban Water Management Plan (RUWMP)	
	If Supplier selected RUWMP, select name from the drop-down.	
NOTES:		

Submittal Table 2-3: Supplier Identification	
Type of Supplier (select one or both)	
☐	Supplier is a wholesale supplier
☒	Supplier is a retail supplier
Fiscal or Calendar Year (select one)	
☐	UWMP Tables are in calendar years
☒	UWMP Tables are in fiscal years
If using fiscal years provide month and date that the fiscal year begins (mm/dd)	
7/1	
Units of measure used in UWMP (Select from the drop down list).	
Unit	AF
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES: Fiscal year begins on July 1st of each year.	

Submittal Table 2-4 Retail: Water Supplier Information Exchange Water Code Section 10631(h)
The retail Supplier has informed the following wholesale supplier(s) of projected water use.
Wholesale Water Supplier Name
Add additional rows as needed
Municipal Water District of Orange County (MWDOC)

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	168,315	167,762	167,396	166,548	164,639	162,767
NOTES: Projections are prepared by the Center for Demographic Research (CDR). Data reflects MWDOC Retail Service Provider Boundaries as of January 2025.						

Submittal Table 4-1 Retail: Total Uses for Potable and Non-Potable Water — Actual Water Code Section 10631(d)(1)			
Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family		Potable	13,365
Multi-Family		Potable	2,571
Commercial	Commercial and Institutional	Potable	2,182
Landscape		Potable	2,848
Distribution System Water Loss		Potable	1,262
Other (optional)	Potable Hydrant	Potable	7
Subtotal Potable			22,235
Subtotal Non-Potable			0
Total			22,235
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES: The District does not have industrial water use in the service area. Institutional water use is not tracked separately from commercial water use. Units are in AFY for FY 2024-2025.			

Submittal Table 4-2 Retail: Total Uses for Potable, and Non-Potable Water — Projected Water Code Section 10631(d)(1)

Use Type	Additional Description (as needed)	Projected Water Use (Report To the Extent that Records are Available)					
Drop down list May select each use multiple times These are the only Use Types that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (OPTIONAL) Drop down list	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 opt (AF)
Add additional rows as needed.							
Single Family		Potable	15,108	14,564	14,216	13,814	13,412
Multi-Family		Potable	2,629	2,535	2,474	2,404	2,334
Commercial	Commercial and Institutional	Potable	2,283	2,201	2,149	2,088	2,027
Landscape		Potable	3,022	2,913	2,843	2,763	2,682
Other (optional)	Potable Hydrant	Potable	24	22	22	21	22
Subtotal Potable			23,066	22,235	21,704	21,090	20,477
Subtotal Non-Potable			0	0	0	0	0
Total			23,066	22,235	21,704	21,090	20,477
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES: Projections reflect the latest population count from CDR as well as known new development projects provided by city staff.							

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? Drop down list (y/n)	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. Optional Suppliers may complete Optional Submittal Table 4-4 R to quantify the expected savings.	Section 4: Estimated Future Water Savings, Section 7: Water Service Reliability and Drought Risk Assessment, Section 8: Water Shortage Contingency Plan
Are Lower Income Residential Demands Included In Projections? Drop down list (y/n)	Yes
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES: All residential areas are included in the demand projections. Water savings are incorporated in assumptions for on-going water conservation programs (e.g., turf conversion).	

Optional Submittal Table 4-4 Retail: Passive Water Savings Projections Water Code Section 10631(d)(4)(A)
NOTES: Not used in the 2025 UWMP.

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
CA 3010073	2020	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES: Submitted using AWWA process for water loss audit reporting.		

**Submittal Table 4-6 (A) Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)**

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit		Real Water Loss Per Unit per Day
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)	
CA 3010073	Yes	26.5	Gallons per Service Connection per Day (GPSCD)	54,089	1,037	17.1

[Water Board's Calculated Water Loss Standards](#)

DWR NOTES: Units of measure (AF, CCF, MG) for Water Loss MUST remain consistent with units reported in Submittal Table 2-3. The units reported in Submittal Table 2-3 are used in this table's calculations.

**Submittal Table 4-6 (B) Retail: Progress Towards 2028 Water Loss Standard
Water Code Section 10631(d)(3)(C)**

Public Water System ID # Reported in Submittal Table 2-1 R	Apparent Water Loss				
	State Water Board Standard		Most Recent AWWA Water Loss Audit		Apparent Water Loss Per Unit per Day
	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	
CA 3010073	5.3	Gallons per Service Connection per Day (GPSCD)	54,089	226	3.7

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40				
☐		Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.		
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?
No	Individual Target	173	121	Yes
DWR NOTES: Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies. Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance. NA=Not Applicable NOTES: Values are presented in gallons per capita per day (GPCD).				

Submittal Table 6-1 Retail: Groundwater Volume Pumped Water Code Section 10631(4) and 10631(4)(c)							
☒		Check the box if the Supplier does not pump groundwater. Proceed to the next table.					
☐		Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)					
Groundwater Type Drop Down List May use each category multiple times	Potable or Non-Potable (OPTIONAL) Drop down list	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
Add additional rows as needed							
Total			0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES							

Submittal Table 6-2 Retail: Wastewater Collected Within Service Area Water Code Section 10633(a)				
☐		Check the box if there is no wastewater collection system. Proceed to the next table.		
100%		Percentage of 2025 service area served by wastewater collection system (OPTIONAL)		
100%		Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)		
Wastewater Collection			Recipient of Collected Wastewater	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL Drop Down List	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number Drop down list	Is WWTP Located Within UWMP Area? Drop Down List
Add additional rows as needed				
MNWD	Metered	1,783	3A Treatment Plant, Place ID 241540	Yes
MNWD	Metered	8,038	Regional TP, Place ID 241053	Yes
MNWD	Estimated	1,568	Latham WWP, Place ID 236649	No
Total Wastewater Received from UWMP Service Area in 2025:		11,389		
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.				
NOTES:				

Submittal Table 6-3 Retail: Wastewater Treatment and Outcomes Within UWMP Service Area														
Water Code Section 10633(b)														
☐ Check the box if no wastewater is treated or disposed of within the UWMP service area. Proceed to the next table.														
Wastewater Treatment Plant Name and Place ID Number Drop down list	Does This Plant Treat Wastewater Generated Outside the UWMP Service Area? (OPTIONAL) Drop down list	2025 Volume of Wastewater Received from UWMP Service Area (As Reported in Submittal Table 6-2 R) (AF)	Total 2025 Volume of Water Treated (AF)	2025 Outcomes of Treated Wastewater										
				Water Recycled Within UWMP Service Area (enter data as applicable)		Water Recycled Outside of UWMP Service Area (enter data as applicable)		Effluent Discharge that is not a Permitted Recycled Water Use (enter data as applicable)		Required Discharge for Instream Flow (enter data as applicable)		Delivered to Another Entity for Additional Treatment (enter data as applicable)		
				Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Treatment Level Drop down list	Volume (AF)	Name of other entity
Add additional rows as needed														
SOCWA - 3A Treatment Plant,	Yes	1,783	1,783	Tertiary	1,069	Tertiary	-	Secondary, Undisinfected	714		-		-	
SOCWA - Regional TP, Place ID 241053	No	8,038	8,038	Tertiary	4,562	Tertiary	-	Secondary, Undisinfected	3,477		-		-	
Latham WWP, Place ID 236649	Yes	1,568	1,568	Secondary, Undisinfected	-	Secondary, Undisinfected	-	Secondary, Undisinfected	1,568		-		-	
Total		11,389	11,389		5,631		0		5,759		0		0	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.														
NOTES: All wastewater received at the MNWD facilities is treated to either tertiary or secondary standards. The Latham Plant does not treat wastewater to tertiary standards, secondary effluent is produced there under SOCWA. The 3A and Regional Treatment Plant are owned and operated by MNWD.														

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area Water Code Section 10633 (c),(d),(e)									
☐		Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.							
Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :			3A and Regional Treatment Plant						
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :			Moulton Niguel Water District						
Volume of Supplemental Water Added in 2025 (OPTIONAL) :			Moulton Niguel Water District						
Source of 2025 Supplemental Water (OPTIONAL) :			Municipal Water District of Orange County						
Use Type Drop down list	Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	Potential Recycled Water Use Volume
Add additional rows as needed									
Landscape irrigation (exc golf courses)	Non-Potable	Tertiary	4,916	4,080	4,122	4,163	4,204	4,245	215
Golf course irrigation	Non-Potable	Tertiary	749	866	874	883	892	901	0
Subtotal Potable			0	0	0	0	0	0	0
Subtotal Non-Potable			5,665	4,946	4,996	5,046	5,096	5,146	215
Total			5,665	4,946	4,996	5,046	5,096	5,146	215
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table. Potential recycled water use: a description of the feasibility of these uses must be included in the narrative. Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.									
NOTES: For potential recycled water use, MNWD sees new recycled water customer conversions at around 3-10 AF per year, for use as irrigation. See Table 6-6 for additional information.									

Submittal Table 6-5 Retail: 2020 UWMP Recycled Water Use Projection Compared to 2025 Actual
Water Code Section 10633(e)

☐	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. Proceed to the next table.	
Use Type Drop Down list	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Landscape irrigation (exc golf courses)	5,758	4,916
Golf course irrigation	640	749
Total	6,398	5,665
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3 Additional Guidance: See Appendix M, Section M.21 for guidance on this table.		
NOTES:		

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use
Water Code Section 10633(f)

☐	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
Pg. 6-10, 6-11	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
Conversion from Potable	New Recycled Water Customers - Irrigation Use	2025-2050	215
Total (AF)			215
Unit Conversion to AF			215
DWR NOTES: Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3. The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.			
NOTES: MNWD sees new recycled water customer conversions at around 3-10 AF per year, for use as irrigation.			

Submittal Table 6-7 Retail: Expected Future Water Supply Projects or Programs Water Code Section 10631(f)							
☐	Check the box if there are no expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Proceed to the next table.						
☐	Check the box if 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.						
Pg. 6-12 and 6-13	Provide page location of narrative in the UWMP						
Name of Future Projects or Programs	Joint Project with other suppliers?		Additional Description (as needed)	Potable or Non-Potable (after treatment if treated)	Planned Implementation Year	Planned for Use in Year Type Drop Down List	Expected Increase in Water Supply to Supplier (This may be a range) (AF)
	Drop Down List (yes/no)	If Yes, Supplier Name					
Add additional rows as needed							
Direct Potable Reuse	No	NA	Optimize, Adaptive, Sustainable, Integrated, Supply (OASIS) Water Resource Center	Potable	2038	All Year Types	3,360
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3.							
NOTES: The Direct Potable Reuse project currently being considered would produce up to 3 million gallons per day (MGD) or 3,360 AF per year. The OASIS Project is currently in the planning phase.							

Submittal Table 6-8 Retail: Water Supplies — Actual Water Code Section 10631(b)			
Water Supply	Additional Description (as needed)	2025	
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool		Potable or Non-Potable (after treatment if treated) (OPTIONAL) Drop Down list	Actual Volume (AF)
Add additional rows as needed			
Purchased or Imported Water	Purchased from MWDOC	Potable	22,235
Recycled Water	Produced Locally	Non-Potable	5,665
Subtotal Potable			22,235
Subtotal Non-Potable			5,665
Total			27,900
DWR NOTES:			
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.			

**Submittal Table 6-9 Retail: Water Supplies — Projected
Water Code Section 10631 (b)**

Water Supply	Additional Detail on Water Supply	Potable or Non- Potable (after treatment if treated)	Projected Water Supply (Report to the Extent Practicable)				
			2030	2035	2040	2045	2050 (opt)
Drop down list May use each category multiple times. These are the only water supply categories that will be recognized by the WUEdata online submittal tool			Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)	Reasonably Available Volume (AF)
Purchased or Imported Water		Potable	23,066	22,235	21,704	21,090	20,477
Recycled Water		Non-Potable	4,946	4,996	5,046	5,096	5,146
Subtotal Potable			23,066	22,235	21,704	21,090	20,477
Subtotal Non-Potable			4,946	4,996	5,046	5,096	5,146
Total			28,012	27,231	26,750	26,186	25,623
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.							
NOTES: Optional columns for total entitlement are not applicable and have been removed from this table.							

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)**NOTES:** Not used in the 2025 UWMP.**OPTIONAL Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison - POTABLE**

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	23,066	22,235	21,704	21,090	20,477
Use totals (autofill from Submittal Table 4-2 R)	23,066	22,235	21,704	21,090	20,477
Revised Surplus/(shortfall)	0	0	0	0	0

NOTES: Optional table is used to split imported water and recycled water.**OPTIONAL Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison -
NON-POTABLE**

	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals (autofill from Submittal Table 6-9 R)	4,946	4,996	5,046	5,096	5,146
Use totals (autofill from Submittal Table 4-2 R)	4,946	4,996	5,046	5,096	5,146
Revised Surplus/(shortfall)	0	0	0	0	0

NOTES: Optional table is used to split imported water and recycled water.

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
Supply totals	23,527	22,680	22,138	21,512	20,887
Use totals	23,527	22,680	22,138	21,512	20,887
Surplus/(shortfall)	0	0	0	0	0
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES: Includes imported water supply and demands.					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	23,527	22,680	22,138	21,512	20,887
	Use totals	23,527	22,680	22,138	21,512	20,887
	Surplus/(shortfall)	0	0	0	0	0
Second year	Supply totals	22,040	21,246	20,738	20,151	19,566
	Use totals	22,040	21,246	20,738	20,151	19,566
	Surplus/(shortfall)	0	0	0	0	0
Third year	Supply totals	21,709	20,927	20,427	19,849	19,272
	Use totals	21,709	20,927	20,427	19,849	19,272
	Surplus/(shortfall)	0	0	0	0	0
Fourth year	Supply totals	21,492	20,718	20,223	19,651	19,080
	Use totals	21,492	20,718	20,223	19,651	19,080
	Surplus/(shortfall)	0	0	0	0	0
Fifth year	Supply totals	21,331	20,562	20,071	19,503	18,936
	Use totals	21,331	20,562	20,071	19,503	18,936
	Surplus/(shortfall)	0	0	0	0	0
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.						

NOTES: Assessment includes modeled customer demand projections and imported supplies used to meet demands over the next 20 years.

**Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment
Water Code Section 10635(b)(3)**

2026	Total
Total Water Use (AF)	22,680
Total Supplies (AF)	22,680
Surplus/Shortfall w/o WSCP Action	0
2027	Total
Total Water Use (AF)	22,382
Total Supplies (AF)	22,382
Surplus/Shortfall w/o WSCP Action	0
2028	Total
Total Water Use (AF)	22,046
Total Supplies (AF)	22,046
Surplus/Shortfall w/o WSCP Action	0
2029	Total
Total Water Use (AF)	21,825
Total Supplies (AF)	21,825
Surplus/Shortfall w/o WSCP Action	0
2030	Total
Total Water Use (AF)	21,662
Total Supplies (AF)	21,662
Surplus/Shortfall w/o WSCP Action	0

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

NOTES: Projections are based on modeled customer demands as well as historic response to water efficiency outreach campaigns conducted in response to drought. Potable demands are met 100% by imported water, purchased from MWDOC and conveyed by MWD.

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels
Water Code Section 10632(a)(3)(B)

☒	Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.		
Standard Shortage Levels	Percent Shortage Range	Suppliers Shortage Levels	Percent Shortage Range
1	Up to 10%	NA	NA
2	Up to 20%	NA	NA
3	Up to 30%	NA	NA
4	Up to 40%	NA	NA
5	Up to 50%	NA	NA
6	>50%	NA	NA
NOTES: Not applicable. MNWD uses the six standard shortage levels.			

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions
Water Code Section 10632(a)(4)(A),(C) and (E)

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier Drop down list These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
1	Other Purchases	Volume	1,112	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
2	Other Purchases	Volume	2,224	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
3	Other Purchases	Volume	3,335	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
4	Other Purchases	Volume	4,447	MNWD could purchase additional imported supplies from MWD to meet shortage demands.
5	Other Actions (describe)	Volume	1,768	Emergency supply available from South Orange County interconnection during emergency water shortages. The maximum incident volume IRWD will supply is 1,768 AF, until 2030.
6	Other Actions (describe)	Volume	1,768	Emergency supply available from South Orange County interconnection during emergency water shortages. The maximum incident volume IRWD will supply is 1,768 AF, until 2030.
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES: The other purchase amounts listed in Stages 1-4 are based on 2025 potable water use. It is assumed the District could purchase additional supplies from MWD at potentially higher tier rates to supplement supplies during a drought; up to 5 percent for Stage 1, 10 percent for Stage 2, 15 percent for Stage 3 and 20 percent for Stage 4. Stages 5 and 6 may have access to emergency supply from our interconnection agreement (i.e., from emergency outages and not during a drought).				

Submittal Table 8-3 Retail: Demand Reduction Actions
Water Code Section 10632(a)(4)(B),(D), and (E)

Yes	Is the Supplier completing this table using the standard six levels? (yes/no)				
Shortage Level	Demand Reduction Actions These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? For Retail Suppliers Only Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
1	Expand Public Information Campaign	Volume	125	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency programs.	No
1	Other Actions (describe)	Volume	2,099	Voluntary Reductions through conservation BMPs.	No
2	Expand Public Information Campaign	Volume	240	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
2	Implement or Modify Drought Rate Structure or Surcharge	Volume	4,207	Conservation Penalty applied to water use in excess of 125% of water budget.	Yes
3	Expand Public Information Campaign	Volume	340	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
3	Implement or Modify Drought Rate Structure or Surcharge	Volume	6,331	Conservation Penalty applied to water use in excess of 100% of water budget.	Yes

4	Expand Public Information Campaign	Volume	430	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
4	Implement or Modify Drought Rate Structure or Surcharge	Volume	8,464	Conservation Penalty applied to water use in excess of modified water budget; outdoor water budgets would be reduced by 40 percent.	Yes
5	Expand Public Information Campaign	Volume	515	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
5	Implement or Modify Drought Rate Structure or Surcharge	Volume	10,603	Conservation Penalty applied to water use in excess of modified water budget; outdoor water budgets would be reduced by 70 percent.	Yes
6	Expand Public Information Campaign	Volume	565	The public education campaign would promote all of the District's indoor and outdoor rebate programs and other water use efficiency measures, including conservation BMPs.	No
6	Implement or Modify Drought Rate Structure or Surcharge	Volume	11,664	Conservation Penalty applied to water use in excess of modified water budget; outdoor water budgets eliminated and indoor water budgets reduced from 55 GPCD to 40 GPCD.	Yes
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES: Demand reduction estimates are based on 2025 actual potable water use. Quantified amounts assumes reductions up to 10 percent for Stage 1, 20 percent for Stage 2, 30 percent for Stage 3, 40 percent for Stage 4, 50 percent for Stage 5, and 60 percent for Stage 6. Actual demand reductions achieved during the WSCP stage may or may not fall within the range identified in the WSCP. The demand reduction estimates for the drought rate structure or surcharge are based on conditions experienced in the 2015 extreme drought and subsequent 5-year studies regarding price elasticity of water. While the demand reduction estimates are quantified in this table for each action; there is a relationship between rates, outreach, and customer understanding to overall water demand reduction. These estimates were made for purposes of this table; however, direct conclusions should not be drawn since there is a critical dependency on human behavior changes paired with outreach and education efforts.					

**Submittal Table 10-1 Retail: Notification to Cities and Counties
Water Code Section 10621(b) and 10642**

City Name	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
City of Aliso Viejo	Yes	Yes
City of Dana Point	Yes	Yes
City of Laguna Hills	Yes	Yes
City of Laguna Niguel	Yes	Yes
City of San Juan Capistrano	Yes	Yes
City of Mission Viejo	Yes	Yes
County Name Drop Down List	60 Day Notice Drop Down (yes/no)	Notice of Public Hearing Drop Down (yes/no)
Add additional rows as needed		
Orange County	Yes	Yes
NOTES: Notices were also sent to neighboring water districts and agencies, as listed above.		

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Appendix C

Water Shortage Contingency Plan and Ordinance



ORDINANCE NO. 26-02

AN ORDINANCE OF THE MOULTON NIGUEL WATER DISTRICT ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN AND PRESCRIBING WATER CONSERVATION RULES AND REGULATIONS

WHEREAS, the Moulton Niguel Water District (District) is a California Water District organized and operating according to California law; and

WHEREAS, periodic droughts are a historical fact in the State of California; and

WHEREAS, the District relies on imported water from outside District boundaries to serve its customers; and

WHEREAS, the quality and quantity of imported water is under the control of other agencies, and may be subject to conditions beyond the control of those other agencies or the District; and

WHEREAS, California Constitution Article X, Section 2 and California Water Code Section 100 provide that because of conditions prevailing in the state of California (the "State"), it is the declared policy of the State that the general welfare requires that the water resources of the State shall be put to beneficial use to the fullest extent of which they are capable, the waste or unreasonable use of water shall be prevented, and the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and the public welfare; and

WHEREAS, pursuant to California Water Code Section 106, it is the declared policy of the State that the use of water for domestic use is the highest use of water and that the next highest use is for irrigation; and

WHEREAS, pursuant to California Water Code Sections 375-378, the District is authorized to adopt and enforce a water conservation program to reduce the quantity of water used by persons within its jurisdiction for the purpose of conserving the water supplies of the District; and

WHEREAS, the California Legislature amended the Urban Water Management Planning Act in 2018 to include additional water shortage planning requirements, including the adoption of Water Shortage Contingency Plans (WSCP) with prescribed elements, and the District must describe in its WSCP the legal authorities that empower the District to enforce shortage response actions identified in its WSCP; and

WHEREAS, because of the prevailing conditions in the State and the declared policy of the State, the District hereby finds and determines that it is necessary and appropriate for the District to amend, adopt, implement, and enforce a water conservation program to reduce the quantity of water used by consumers within the District to ensure that there is sufficient water for

human consumption, sanitation, and fire protection and to ensure the District can implement and enforce the shortage response actions specified in its WSCP; and

WHEREAS, pursuant to California Water Code Section 350, the Board of Directors is authorized to declare a water shortage emergency to prevail within its jurisdiction when it finds and determines that the District will not be able to or cannot satisfy the ordinary demands and requirements of water consumers without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection, and as more fully set forth in this chapter, based upon the occurrence of one or more of the following conditions or circumstances:

- A. A general water supply shortage due to increased demand and/or limited supplies.
- B. Distribution or storage facilities of the District, or any agency supplying water to the District, become inadequate or are restricted.
- C. A major failure of the supply, storage, and/or distribution facilities of the District or any agency supplying water to the District.
- D. Contamination of the water supply, storage, and/or distribution facilities of the District or any agency supplying water to the District.
- E. Act of nature which in the opinion of the District constitutes an emergency situation or which require special water conservation actions.

WHEREAS, in the event the District determines that it is necessary to declare that a water shortage emergency exists, this Ordinance authorizes the District to implement certain shortage response measures and a water conservation and regulatory program to regulate water consumption activities within the District and ensure that the water delivered in the District is put to beneficial use for the greatest public benefit, with particular regard to domestic use, including human consumption, sanitation, and fire protection, and that the waste or unreasonable use of water is prevented; and

WHEREAS, the District is authorized to prescribe and define by ordinance restrictions, prohibitions, and exclusions for the use of water during a threatened or existing water shortage and adopt and enforce a water conservation and regulatory program to: (i) prohibit the waste of District water or the use of District water during such period; (ii) prohibit use of water during such periods for specific uses that the District may from time to time find nonessential; and (iii) reduce and restrict the quantity of water used by those persons within the District for the purpose of conserving the water supplies of the District; and

WHEREAS, the District hereby finds and determines that the District shall: (i) implement water conservation and water shortage response measures; (ii) regulate the water consumption activities of persons within the District for the purposes of conserving and protecting the District's water supplies, reducing the quantity of water consumed, and deterring and preventing the waste or unreasonable use or unreasonable method of use of valuable water resources; and (iii) establish and collect regulatory fees and impose administrative penalties as set forth herein to accomplish these purposes and/or recover the costs of the District's water conservation and regulatory program; and

WHEREAS, the District hereby finds and determines that it is desirable to codify the rules and regulations governing its actions, and the actions of persons using and consuming water within the District, particularly during declared water shortages and water shortage emergencies, to protect the general welfare and the District's water supplies, and to reduce water consumption in accordance with the declared policies and laws of the State; and

WHEREAS, the District desires to adopt an amended WSCP in the form attached hereto as Exhibit A, and by this reference, incorporated herein, and further desires to establish standards and procedures to enable implementation and enforcement of local water shortage contingency measures that align with the California Water Code Section 353 which specifies that "when the governing body has so determined and declared the existence of an emergency condition of water shortage within its service area, it shall thereupon adopt such regulations and restrictions on the delivery of water and the consumption within said area of water supplied for public use as will in the sound discretion of such governing body conserve the water supply for the greatest public benefit with particular regard to domestic use, sanitation, and fire protection."

NOW THEREFORE BE IT ORDAINED by the Board of Directors of the Moulton Niguel Water District as follows:

Section 1. Findings and Determinations

The District hereby finds and determines that the above recitals are true and correct and incorporated herein.

Section 2. Adoption of Water Shortage Contingency Plan

The District hereby adopts an amended Water Shortage Contingency Plan in the form attached hereto as Exhibit A, and by this reference, such Water Shortage Contingency Plan is incorporated as if fully set forth herein. This Ordinance, including the Water Shortage Contingency Plan attached hereto and incorporated herein, shall also serve as the District's Water Conservation Ordinance in accordance with Section 375 *et seq.* of the California Water Code.

Section 3. Amendments to District Rules and Regulations.

The District's Article IV Rules and Regulations, Section 5.N., and Exhibit G, amendments to Section 5.N., are hereby rescinded in their entirety and replaced with the following rules and regulations governing water conservation:

N. Water Conservation

1. Findings and Intent

(A) **Findings.** The Board of Directors finds and determines that it is necessary and appropriate for the District to adopt, implement, and enforce a water conservation program, based on the WSCP, to reduce the quantity of water used by persons within the District to ensure that there is sufficient water for human consumption, sanitation, and fire protection. The District

further finds and determines that during periods of drought, water shortages, and water shortage emergencies the general welfare requires that the District maximize the beneficial use of its available water resources to the extent that it is capable, and that the waste or unreasonable use, or unreasonable method of use of water shall be prevented and the conservation of water is to be extended with the view to the reasonable and beneficial use thereof in the interests of the people of the District and for the public health, safety, and welfare.

(B) **Intent.** This Section 5.N. is intended to establish:

(1) permanent water conservation Best Management Practices (BMPs) and response measures;

(2) six standard water shortage levels that provide defined response actions to be implemented during times of declared water shortage or declared water shortage emergency;

(3) rules, regulations, and restrictions on water use (the “Rules”) to be implemented during declared water shortage stages, with increasing restrictions on water use in response to decreasing water supplies and worsening water shortage conditions.

(C) **Demand Management Through Rate Structure Design.** The District’s water budget-based rate structure is designed and intended to be a water demand management tool and to proportionately recover the costs of providing water service within the District. The District’s efforts in managing its water supply are best achieved through its water budget-based rate structure and the calculated water budgets provided to the District’s customers.

(D) **Use of Property.** This Section 5.N. is not intended to repeal, abrogate, annul, impair or in any way interfere with the free use of property by covenant, deed, or other private agreement or with restrictive covenants running with the land to which the District provides water services.

2. Purposes and Scope

(A) **Purposes.** The purposes of this Section 5.N. are to:

(1) protect the health, safety, and welfare of the citizens and property owners of the District;

(2) assure the maximum beneficial use of available water supplies;

(3) attempt to provide sufficient water supplies to meet, at a minimum, the basic needs of human consumption, sanitation, and fire protection; and

(4) authorize restrictions in water use during declared water shortages to maximize the beneficial use of water, and the imposition of penalties for violations of the Rules.

(B) **Scope.** The provisions of this Section 5.N. shall apply to all persons within the District and all property served by the District wherever situated, regardless of whether any person using potable water or recycled water has a contract or account for water service. Nothing in this Section 5.N. is intended to affect or limit the ability of the District to respond to an emergency, including an emergency that affects the ability of the District to supply water.

3. Definitions

For the purposes of this Section 5.N., the following words, terms, and phrases shall have the following meanings:

(A) “Appellant” means the person appealing the imposition of a penalty imposed by the District for a violation of the Rules pursuant to this Section 5.N.

(B) “BMPs” mean best management practices.

(C) “Calculated water budget” means the water budget calculated by the District for each property in accordance with the District’s water rate structures.

(D) “Calculated recycled water budget” means the recycled water budget calculated by the District for each property in accordance with the District’s recycled water rate structure.

(E) “District” means the Moulton Niguel Water District.

(F) “General Manager” means the General Manager of the District or her or his authorized designee.

(G) “Immediate emergency” shall have the meaning set forth in Section 5.N.6.(C).

(H) “Nonfunctional turf” shall have the meaning set forth in Section 10608.12 of the California Water Code.

(I) “Person” means any natural person, firm, joint venture, joint stock company, partnership, public or private association, club, company, corporation, business trust, organization, public or private agency, government agency or institution, school district, college, university, any other user of water provided by the District, or the manager, lessee, agent, servant, officer or employee of any of them or any other entity which is recognized by law as the subject of rights or duties.

(J) “Potable Water” means that water furnished to the customer which complies with federal and State drinking water regulations and standards, or any other applicable standards, for human consumption.

(K) “Property owner” or “owner” means the record owner of real property as shown on the most recently issued equalized assessment roll.

(L) “Recycled water” means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource.

(M) “Rules” shall have the meaning set forth in in Section 5.N.1.(B)(3).

(N) “State” means the state of California, including any department or regulatory agency thereof.

(O) “Water customer” or “customer” means a person who, according to the District’s records, has an account with the District and receives water service or recycled water service to a parcel of property.

(P) “WSCP” means Water Shortage Contingency Plan.

(Q) “Water shortage emergency” means a condition existing within the District in which the ordinary water demands and requirements of persons within the District cannot be satisfied without depleting the water supply of the District to the extent that there would be insufficient water for human consumption, sanitation, and fire protection. A water shortage emergency includes both an immediate emergency, in which the District is unable to meet current water needs of persons within the District, as well as a threatened water shortage, in which the District determines that its future supply of water may not meet an anticipated future demand.

4. Permanent Water Conservation Requirements– Prohibition Against Waste

Water Conservation Best Management Practices. The District implements water conservation BMPs to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District’s water supplies. The District’s water conservation BMPs shall be in effect at all times as prescribed by the Board. Violations of this Section constitute waste and an unreasonable use of water.

(A) **Installation of Water Conservation Devices.** No water shall be provided by the District for internal or external use to any residential, commercial, industrial, agricultural, recreational, governmental, or public building or structure of any kind which is constructed or altered and in which either internal or external irrigation or domestic water piping or water fixtures are to be installed, extended, or altered in any way, including, but not limited to, any plumbing, water piping, or water fixtures for which a construction permit is required to be obtained from the County of Orange or its successor, or for which District approval of plans and service applications are required, unless the new, extended, or altered plumbing, water piping, or other water using facilities conform to the requirements and standards of the District’s Rules and Regulations.

(B) **Standards for Water Conservation Devices.** The required water conservation devices and standards of the District are those set forth on Exhibit "F" to these Rules

and Regulations. Nothing herein provided shall be deemed to relieve any person from compliance with the plumbing code of the County of Orange or any other state or local plumbing or building requirements.

(C) **Limits on Watering Hours.** Watering or irrigating any lawn, landscape, or other vegetated area with potable water between the hours of 9:00 a.m. and 5:00 p.m. Pacific time on any day shall be restricted, except by use of a hand-held bucket or similar container reasonably used to convey water for irrigation purposes, a hand-held hose equipped with a fully functioning, positive self-closing shut-off nozzle or device may be used during the otherwise restricted period. If necessary, and for very short periods of time for the express purpose of adjusting or repairing an irrigation system, one may operate an irrigation system during the otherwise restricted period.

(D) **No Watering During Rain.** Watering or irrigating any outdoor landscapes with potable water during and up to forty-eight (48) hours after one quarter inch ($\frac{1}{4}$ ") rainfall within a twenty-four (24) hour period is prohibited.

(E) **Water Efficient Landscapes. Plant Low-Water Demand Plants and Trees.** When installing new or renovated landscaping, it is recommended that all customers utilize only low-water demand plants and trees. For recreational use or community space, newly installed or renovated turf should only be functional turf as defined in Section 10608.12 of the Water Code.

(F) **No Excessive Water Flow or Runoff.** No person shall cause or allow watering or irrigating any lawn, landscape, or other vegetated area in a manner that causes or allows excessive runoff of potable or recycled water onto an adjoining sidewalk, driveway, street, alley, gutter or ditch, parking lots, structures, non-irrigated areas, or off the property.

(G) **No Washing Down Hard or Paved Surfaces.** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a fully functioning, positive self-closing shut-off device or a low-volume, high-pressure cleaning machine equipped to recycle any water used.

(H) **Obligation to Fix Leaks, Breaks or Malfunctions.** Excessive use, loss or escape of potable or recycled water through breaks, leaks or other malfunctions in the water user's plumbing or distribution system should be avoided for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than five (5) days of receiving notice from the District, is prohibited.

(I) **Re-circulating Water Required for Decorative Water Fountains and Decorative Water Features.** Operating a decorative water fountain or other decorative water feature that does not use re-circulated water is prohibited.

(J) **Limits on Washing Vehicles.** Using potable water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not, is prohibited, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a fully functioning, positive self-closing automatic water shut-off

nozzle or a low volume power washer with a fully functioning, positive self-closing shut-off nozzle. This paragraph does not apply to commercial car washes or the washing of vehicle regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles used to transport food and perishables.

(K) **Drinking Water Served Upon Request Only.** Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, club or other public place where food or drinks are sold, served, or offered for sale, should only provide drinking water to persons when expressly requested.

(L) **Commercial Lodging Establishments Must Provide Option to Not Launder Linens Daily.** Hotels, motels and other commercial lodging establishments should provide customers the option of not having towels and linens laundered daily. Commercial lodging establishments should prominently display notice of this option in each bathroom using clear and easily understood language.

(M) **Installation of Single Pass Cooling Systems.** Single pass cooling systems shall not be installed in buildings requesting new potable water service.

(N) **Ceased Installation of Non-Recirculating Water Systems in Commercial Car Washes and Laundry Systems.** Non-recirculating water systems in commercial car washes and laundry systems shall not be installed.

(O) **Restaurants Required to Use Water Conserving Dish Wash Spray Valves.** Food preparation establishments, such as restaurants or cafés, shall not use non-water conserving dish wash spray valves.

(P) **Swimming Pools and Spa Covers.** Property owners who have a swimming pool or a spa are encouraged to cover the facilities to minimize water loss due to evaporation.

(Q) **Water Waste and Unreasonable Water Use Prohibited.** The waste or unreasonable use or unreasonable method of use of water by any person shall be prohibited at all times.

(R) **Recycled Water Use Required if Available.** After the District has provided to the user an analysis demonstrating that recycled water is available, cost effective, and safe for the intended use, and the user has been given a reasonable time to make the conversion to recycled water, the use of potable water is prohibited unless otherwise granted exemption by the General Manager or their designee.

(S) **Water Recycling – New Service.** Prior to the connection of any new service, the District will determine whether recycled water is available and safe for the intended use to supply all or some of the water needed by the user. If available, and safe for the intended use, recycled water must be used.

(T) **Nonfunctional Turf.** Irrigating nonfunctional turf (as defined in Section 10608.12 of the Water Code) with potable water is prohibited, except to the extent necessary to ensure the health of trees and other perennial nonturf plantings, or to the extent necessary to address an immediate health and safety need on the property types and as of the effective dates as stated in Section 10608.14 of the Water Code.

5. Water Shortages

Reductions in Water Supply. Should the water conservation BMPs be inadequate to protect the District's potable water supply, the District Board of Directors reserves the right to implement further mandatory Rules to reduce the amount of water used within the District. The Rules are necessary to respond to any significant reductions to the District's water supply as a result of drought, natural disasters, regulatory action, and planned or unplanned potable water shortages, including but not limited to, shortages arising from the following circumstances or events that are or may impact the District's water supply:

(A) Metropolitan Water District of Southern California (MWD) and/or the Municipal Water District of Orange County (MWDOC), the District's wholesale water supplier, has determined that a drought, water shortage, or water shortage emergency exists or has implemented or taken other actions requiring a reduction in water demand;

(B) MWD's Water Supply Allocation Plan implementation or other actions resulting in a reduction in water supply;

(C) The State has determined that a drought, water shortage, or water shortage emergency exists;

(D) The State has implemented restrictions on the use of water or reduced or restricted the delivery of wholesale water to the District;

(E) Regional or statewide importation or local distribution systems or facility(ies) have failed or have been shut down (e.g., a main break, reservoir, pipeline, canal, or other distribution or conveyance system failure);

(F) Alternative water supplies are limited or unavailable; and,

(G) Any other natural disaster that impacts the availability of water to the District.

6. Declaration of Water Shortages

(A) **Determination of Water Supply Shortage.** The District will follow the written decision-making process defined in the WSCP to assess water supply reliability on an annual basis and shall submit a water shortage assessment report to the California Department of Water Resources by July 1 of each year.

(1) The District will determine if a water shortage exists based on the water shortage criteria and stages defined in the WSCP.

(2) In the event a water shortage is triggered according to the procedures and conditions defined in the WSCP, the Board of Directors will declare a shortage according to the defined water shortage levels in the WSCP and as set forth below.

(B) Declaration of Water Shortage Emergency and Declaration of Water Shortages. Excepting in event of a breakage or failure of water treatment, storage, or conveyance infrastructure causing an immediate emergency (an “immediate emergency”), the declaration of a water shortage emergency during any water shortage stage shall be made in accordance with California Water Code Sections 350 *et seq.* The District will follow the written decision-making process defined in the WSCP to declare a water shortage. The declaration of any water shortage stage will be through the adoption of a resolution of the Board of Directors after a public hearing upon notice. The resolution shall specify the stage and required shortage response actions, including penalties.

(C) Determination of Immediate Emergency. Notwithstanding the forgoing, if an immediate emergency occurs and the Board of Directors cannot meet in time to act to protect the public interest pursuant to this Section 5.N., the General Manager is hereby authorized and directed to implement such provisions of this Section 5.N. upon his or her written determination that the District cannot supply adequate water to meet the ordinary demands of water consumers, and that such implementation is necessary to protect the public health and safety.

(1) The implementation of any such provisions shall take effect immediately upon making a public announcement of the immediate emergency and publication of such immediate emergency on the District’s website.

(2) Such written determination shall be delivered to the Board of Directors and considered at a general or special meeting for review, revocation, or ratification. Such meeting shall be held upon the earliest date that a quorum of the Board of Directors is available.

(3) At the Board of Directors meeting, the General Manager shall update the Board of Directors on the severity and length of the immediate emergency.

(4) During an immediate emergency, the District may specify temporary restrictions on the use of potable and recycled water. Any person who willfully fails to comply with those temporary restrictions may be subject to an administrative penalty of \$500 per offense and have his or her water meter locked by the District.

(D) Actions or Restrictions by the State or Other Agencies. In the event the State or other agencies, through executive action, emergency legislation or other actions, impose water conservation requirements that are not included in in this water conservation ordinance, the

Board of Directors is authorized to implement and enforce such requirements as authorized by law.

7. Water Supply Shortage Levels and Response Actions

(A) **Shortage Stages.** The District hereby establishes six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40 and 50 percent shortages and greater than 50 percent shortage, as set forth below. The District's water shortage levels and response actions are aligned with the State water shortage levels and defined in the District's WSCP and therefore comply with the Water Code Section 10632 (a)(3) as identified above. (Wat. Code Section 10632 (a)(3)(A).)

(B) **Water Shortage Stage 1** – Water Shortage Stage 1 constitutes a consumer demand reduction of up to 10%. Shortage response actions listed under this stage include:

(1) **Voluntary Reductions.** During Water Shortage Stage 1 ("Stage 1"), the District's conservation efforts will be focused on voluntary reductions in potable water use. Potable and recycled water customers may reduce demand by following the District's BMPs.

(2) **Refills of Swimming Pools.** Any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(3) **Mandatory Rules Governing Potable Water Use.** During Stage 1, recycled water customers shall be prohibited from using potable water for outdoor irrigation.

(C) **Water Shortage Stage 2** – Constitutes a consumer demand reduction of up to 20%. Shortage response actions listed under this stage include:

(1) **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 2 ("Stage 2"), all water customers, both potable and recycled, are prohibited from using water in excess of 125% of their calculated water budget.

(2) **Penalties.** During Stage 2, a volumetric Conservation Penalty will be applied, as detailed below. Stage 2 penalties for 2026 are listed in the table below for illustrative purposes. The penalty would be based on the effective rates in place at time the water shortage stage is implemented.

- (a) Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.
- (b) The following penalties would apply to each customer class.

- i. Single-Family Residential and Multi-Family
Residential customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 5 and Tier 4 water rates for each unit of water used in Tier 4.
- ii. Potable Irrigation customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.
- iii. Recycled customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.
- iv. Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.

Single Family/Multi-Family Stage 2 Conservation Penalty
Tier 5 Water Rate - Tier 4 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 4 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$7.26	\$4.05

Commercial and Irrigation Stage 2 Conservation Penalty
Tier 4 Water Rate - Tier 3 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 3 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$7.26	\$4.05

Recycled Stage 2 Conservation Penalty
Tier 4 Water Rate - Tier 3 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 3 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$10.79	\$6.69	\$4.10

(3) **Refills of Swimming Pools.** During Stage 2, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of their

calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(4) **New Landscaping Bill Adjustments.** During Stage 2, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(D) **Water Shortage Stage 3** – Water Shortage Stage 3 constitutes a consumer demand reduction of up to 30%. Shortage response actions listed under this stage include:

(1) **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 3 (“Stage 3”), all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.

(2) **Penalties.** During Stage 3, a volumetric Conservation Penalty will be applied as detailed below. Stage 3 penalties for 2026 are listed in the table below for illustrative purposes. The penalty would be based on the effective rates in place at time the water shortage stage is implemented.

- (a) Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.
- (b) The following penalties would apply to each customer class.
 - i. Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty equal the difference between the Tier 5 and Tier 3 water rates for each unit of water used in Tier 3.
 - ii. Potable Irrigation customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
 - iii. Recycled customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
 - iv. Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.

Single Family/Multi-Family Stage 3 Conservation Penalty
Tier 5 Water Rate - Tier 3 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 3 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$4.75	\$6.56

Commercial and Irrigation Stage 3 Conservation Penalty
Tier 4 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$4.75	\$6.56

Recycled Stage 3 Conservation Penalty
Tier 4 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$10.79	\$4.23	\$6.56

(3) **Refills of Swimming Pools.** During Stage 3, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(4) **New Landscaping Bill Adjustments.** During Stage 3, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(E) **Water Shortage Stage 4 –** Water Shortage Stage 4 constitutes a consumer demand reduction of up to 40%. Shortage response actions listed under this stage include:

(1) **Reduction of Potable Water Usage.** During Water Shortage Stage 4 (“Stage 4”), Single Family Residential, Multi-Family Residential, and Potable Irrigation customers will be assessed the volumetric conservation penalty for water usage in excess of 60% of their outdoor water budget due to reduced water supply availability.

(2) **Reduction of Recycled Water Usage.** During Stage 4, Recycled water customers will be assessed the volumetric conservation penalty for water usage in excess of 90% of their outdoor water budget due to reduced water supply availability.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 4, all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets and the amounts required above.

(4) **Penalties.** During Stage 4, a volumetric Conservation Penalty will be applied as detailed below. Stage 4 penalties for 2026 are listed in the table below for illustrative purposes. The penalty would be based on the effective rates in place at time the water shortage stage is implemented.

- (a) The penalty shall be in addition to the water service fees the District charges for the water delivered to the customer.
- (b) The following penalties would apply to each customer class.
 - i. Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 60% of the customer's Tier 2 budget. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between the Tier 5 and Tier 2 water rates.
 - ii. Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 60% of the customer's Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iii. Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 90% of the customer's Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iv. Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.

Single Family/Multi-Family Stage 4 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$3.34	\$7.97

Commercial Stage 4 Conservation Penalty
Tier 4 Water Rate – Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$4.75	\$6.56

Irrigation Stage 4 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$3.34	\$7.97

Recycled Stage 4 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$10.79	\$1.96	\$8.83

(5) **Refills of Swimming Pools.** During Stage 4, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(6) **New Landscaping Bill Adjustments.** During Stage 4, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(F) **Water Shortage Stage 5 –** Water Shortage Stage 5 constitutes a consumer demand reduction of up to 50%. Shortage response actions listed under this stage include:

(1) **Reduction of Potable Water Usage.** During Water Shortage Stage 5 (“Stage 5”), Single Family Residential, Multi-Family Residential, and Irrigation customers using potable water will be assessed the volumetric conservation penalty for water usage in excess of 30% of their outdoor water budget due to reduced water supply availability.

(2) **Reduction of Recycled Water Usage.** All Recycled water customers shall be assessed the volumetric conservation penalty for water usage in excess of 80% of their outdoor water budget due to reduced water supply availability.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 5, all water customers shall be prohibited from using water in excess of their individually calculated water budgets and the amounts required above.

(4) **Penalties.** During Stage 5, a volumetric Conservation Penalty will be applied, as summarized below. Stage 5 penalties for 2026 are listed in the table below for illustrative purposes. The penalty would be based on the effective rates in place at time the water shortage stage is implemented.

- (a) Such penalty shall be in addition to the water service fees the District charges for the water delivered.
- (b) The following penalties would apply to each customer class.
 - i. Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 30% of the customer’s Tier 2 budget. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between Tier 5 and Tier 2 water rates.
 - ii. Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 30% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iii. Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 80% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iv. Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.

Single Family/Multi-Family Stage 5 Conservation Penalty
Tier 5 Water Rate - Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$3.34	\$7.97

Commercial Stage 5 Conservation Penalty
Tier 4 Water Rate – Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$4.75	\$6.56

Irrigation Stage 5 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$3.34	\$7.97

Recycled Stage 5 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$10.79	\$1.96	\$8.83

(5) **Refills of Swimming Pools.** During Stage 5, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.

(6) **New Landscaping Bill Adjustments.** During Stage 5, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

(G) **Water Shortage Stage 6** – Water Shortage Stage 6 constitutes a consumer demand reduction of over 50%. Shortage response actions listed under this stage include:

(1) **Reduction of Potable Water Usage.** During Water Shortage Stage 6 (“Stage 6”), Single Family Residential, Multi-Family Residential, and Irrigation customers using potable water will be assessed the full volumetric conservation penalty for outdoor water uses due to reduced water supply availability.

(a) All Single-Family Residential and Multi-Family Residential customers will be assessed a volumetric conservation penalty on indoor water usage above 40 gallons per capita per day;

(2) **Reduction of Recycled Water Usage.** During Stage 6, all Recycled customers will be assessed a volumetric conservation penalty on outdoor water usage above 70% due to reduced water supply availability.

(3) **Mandatory Rules Governing Customer Water Budgets.** During Stage 6, all customers shall be prohibited from using water in excess of their individually calculated water budgets and the required amounts set forth above. All outdoor irrigation with potable water shall be prohibited within the District’s service area.

(4) **Penalties.** During Stage 6, a volumetric Conservation Penalty will be applied, as summarized below. Stage 6 penalties for 2026 are listed in the table below for illustrative purposes. The penalty would be based on the effective rates in place at time the water shortage stage is implemented.

- (a) Such penalty shall be in addition to the water service fees the District charges for the water delivered.
- (b) The following penalties would apply to each customer class.
 - i. Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 40 gallons per person per day of the customer’s Tier 1 budget. The Conservation Penalty for Single Family Residential and Multi-Family Residential customers will equal the difference between the Tier 5 and Tier 1 rates.
 - ii. Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iii. Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 70% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - iv. Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.

Single Family/Multi-Family Stage 6 Conservation Penalty
Tier 5 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 5 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$2.76	\$8.55

Commercial Stage 6 Conservation Penalty
Tier 4 Water Rate – Tier 2 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 2 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$4.75	\$6.56

Irrigation Stage 6 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$11.31	\$3.34	\$7.97

Recycled Stage 6 Conservation Penalty
Tier 4 Water Rate - Tier 1 Water Rate = Conservation Penalty

Calendar Year	Tier 4 Water Rate (a)	Tier 1 Water Rate (b)	Conservation Penalty (a) - (b)
2026	\$10.79	\$1.96	\$8.83

(5) **Refills of Swimming Pools.** During Stage 6, no customer shall refill a swimming pool.

(6) **New Landscaping Bill Adjustments.** During Stage 6, no customer shall install new landscaping.

8. Protocols for Communication

Notice and Publication. Upon declaration of a water shortage, the District will inform all relevant stakeholders, such as customers, the public, interested parties, and local, regional, and state governments, of the effective date of the water shortage response actions associated with the relevant stage according to the communication protocols identified in the District’s WSCP.

9. Violations and Remedies

(A) **Misdemeanor Violations.** It shall be unlawful for any person to willfully violate the provisions of this Section 5.N. A violation of any of these provisions is a misdemeanor in accordance with California Water Code Section 377.

(B) **Other Remedies.** In addition to any other remedies provided in this Section 5.N or available under applicable law, the District may alternatively seek injunctive relief in the Superior Court or take enforcement action, including discontinuing or appropriately limiting water service to any customer, for violations of this Section 5.N. All remedies provided herein shall be cumulative and not exclusive.

10. Notice and Collection of Penalties

(A) **Notice and Due Process.** As set forth in Section 5.N.8, upon the declaration of a water shortage stage and publication of the notice required herein, due and proper notice shall be deemed to have been given each and every person supplied water within the District of the Rules governing the applicable water shortage stage.

(B) **Collection of Penalties.** Any penalty imposed pursuant to the Rules of any applicable water shortage stage set forth in this Section 5.N. may be collected on a customer's water bill. Any penalty shall be applicable to water used in violation of the Rules during the first complete billing cycle after the declaration of the applicable water shortage stage.

(C) **Notice of Violation.** The receipt of a water bill with any applicable penalties shall serve as notice of violation of the District's Rules.

11. Appeal Procedures

(A) **Appeal Request.** Any person (an "Appellant") who wishes to appeal the imposition of an administrative penalty imposed by the District pursuant to this Section 5.N. shall comply with the following procedures:

(B) **Appeal Request Form.** An Appeal Request form shall be submitted to the Conservation Department.

(1) Appeal Request forms may be obtained at the District's Main Office or downloaded from the District's website at www.MNWD.com.

(2) An Appeal Request form shall be received by the District no later than thirty calendar days from the date that the Appellant's water bill for the four-week period in which the penalty or penalties were imposed is due.

(C) **Additional Documentation.** Additional documentation may be requested at the discretion of the District. Such documentation may include, but is not limited to, school records, driver's licenses, business licenses, lease agreements.

(D) **Site Survey.** After an Appeal Request form has been received, a site survey may be required by District staff to verify the irrigated square footage of the property where the water was delivered. The site survey will be at no charge to the person and will require the person who submitted the Appeal Request form to be present.

(E) **District Response.** A response to an Appeal Request shall be provided by the District within thirty calendar days from receipt of the Appeal Request form.

(F) **Review of Denial of Appeal Request.** If an Appeal Request is denied, the Appeal Request form may be resubmitted by the Appellant for review by the District's Assistant General Manager. The Decision by the District's Assistant General Manager shall be final.

12. Hardship Waiver

(A) **Undue and Disproportionate Hardship.** If, due to unique circumstances, a specific requirement of the WSCP would result in undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property of classes of water users, then the person may apply for a waiver to the requirements as provided in this section.

(B) **Written Finding.** The waiver may be granted or conditionally granted only upon a written finding of the existence of facts demonstrating an undue hardship to a person using water or to property upon which water is used, that is disproportionate to the impacts to water users generally or to similar property or classes of water use due to specific and unique circumstances of the user or the user's property.

(C) **Application and Documentation.** Application for a waiver must be on a form prescribed by the District. The application must be accompanied by photographs, maps, drawings, and/or other information, including a written statement of the applicant.

(D) **Required Findings for Waiver.** An application for a waiver will be denied unless the District's General Manager finds, based on the information provided in the application supporting documents, or such additional information as may be requested, and on water use information for the property as shown by the records of the District, all of the following:

(1) That the waiver does not constitute a grant of special privilege inconsistent with the limitations upon other residents and businesses;

(2) That because of special circumstances applicable to the property or its use, the strict application of the WSCP would have a disproportionate impact on the property of use that exceeds the impacts to residents and businesses generally;

(3) That the authorizing of such waiver will not be of substantial detriment to adjacent properties, and will not materially affect the ability of the District to effectuate the purpose of the WSCP and will not be detrimental to the public interest; and

(4) That the condition or situation of the subject property of the intended use of the property for which the waiver is sought is not common, recurrent or general in nature.

(E) **Approval Authority.** The District's General Manager or designee must act upon any completed application no later than ten (10) days after submittal and may approve, conditionally approve, or deny the waiver. The applicant requesting the waiver must be promptly notified in writing of any action taken. Unless specified otherwise at the time a waiver is approved, the waiver will apply to the subject property during the period of the mandatory water supply shortage condition. The decision of the District's General Manager will be final.

Section 4. Conflicting Provisions

If provisions of Section 5.N. are in conflict with each other, other provisions of the Article IV, any other resolution or ordinance of the District, or any State law or regulation, the more restrictive provisions shall apply.

Section 5. Severability

If any provision, section, subsection, sentence, clause or phrase of this Ordinance, or the application of same to any person or set of circumstances, is for any reason held to be unconstitutional, void or invalid, the validity of the remaining portions of this Ordinance shall not be affected, it being the intent of the Board of Directors in adopting this Ordinance that no portions, provisions, or regulations contained herein shall become inoperative, or fail by reason of the unconstitutionality of any other provision hereof, and all provisions of this Ordinance are declared to be severable for that purpose.

Section 6. Exemption from California Environmental Quality Act

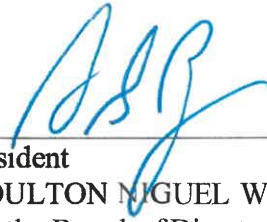
The District finds that this chapter and actions taken hereafter pursuant to this chapter are exempt from the provisions of the California Environmental Quality Act (CEQA) of 1970 as specific actions necessary to prevent or mitigate an emergency pursuant to Section 15307 of the CEQA Guidelines.

Section 7. Effective

This Ordinance shall be effective immediately upon adoption. The Secretary of the Board is hereby directed to publish this Ordinance in accordance with Water Code Section 376.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of Moulton Niguel Water District held on June 11, 2026, by the following vote:

Richard Fiore:	ABSENT
Donald Froelich:	AYE
William Moorhead:	AYE
Brian Parker:	AYE
Brian Probolsky:	AYE
Diane Rifkin:	AYE
Sherry Wanninger:	AYE



President
MOULTON NIGUEL WATER DISTRICT
and the Board of Directors thereof



Secretary
MOULTON NIGUEL WATER DISTRICT
and the Board of Directors thereof

EXHIBIT A
WATER SHORTAGE CONTINGENCY PLAN

[see attached]

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Water Shortage Contingency Plan



moulton niguel water district

Exhibit A

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Chapter 1 Introduction

Moulton Niguel Water District (District or MNWD) relies on imported water and locally produced recycled water to meet customer demands. Imported water is purchased from Metropolitan Water District of Southern California (MWD) through Municipal Water District of Orange County (MWDOC). More frequent and longer-lasting dry periods, regulatory constraints, and seismic risks can result in water delivery system outages that increase stress on water supply reliability. As a result, the District must be prepared to take reasonable actions to balance water demands during a water shortage.

In 2018, two long-term conservation bills, Senate Bill (SB) 606 and Assembly Bill (AB) 1668, were signed into law by Governor Jerry Brown. The two bills amended portions of the California Water Code (CWC) including Section 10632, which requires every urban water supplier prepare and adopt a Water Shortage Contingency Plan (WSCP) with required elements as part of its Urban Water Management Plan (UWMP). While an element of the UWMP, the WSCP is a stand-alone document that can be separately amended. The WSCP is a guide for the District's intended actions during a water shortage.

A water shortage is the lack of sufficient available water resources to meet the demands of water usage within the District, either for a short-term or long-term duration. This WSCP is a detailed proposal for use in the event of drought, water supply reductions, failure of a water distribution system, other emergencies, or regulatory statutes, rules, regulations, or policies reducing water supplies by state and federal agencies with jurisdiction over the District. As the District is responsible for serving its customers with reliable, economical, high-quality water and recycled water services, the District is committed to managing available water supply during normal conditions as well as water shortage conditions such as during droughts or water system emergencies. Due to the possibility of increasing water supply strain caused by more frequent and extreme droughts, the District must be prepared for potential constraints on its local and imported water supply. This WSCP is meant to improve preparedness for droughts and other impacts on water supplies by describing the process used to address varying degrees of water shortages.

Section 1.1 Background

In February 2015, the District Board of Directors adopted Ordinance 15-01 laying the foundation for actions during times of a water shortage or emergency. Pursuant to State law, the District was required to adopt a WSCP to address specific "stages" of action to be undertaken in response to water supply shortages. An agency's WSCP includes specified levels of reduction in the use of water as appropriate for the service area. Recognizing that water is its most vital resource, the District adopted the first WSCP in February 2015, with five water shortage stages and requirements to enable the District to respond to potential shortages, including up to a 50 percent reduction in water supply. In each stage, specific practices were identified to reduce water use to preserve the District's water supplies and protect public health and safety.

Prior to 2015, the District's Water Conservation Program was contained within the District's Rules and Regulations. The 2015 WSCP was written to utilize the District's Water Budget Based Rate Structure to

implement varying stages of restrictions using volumetric conservation penalties as pricing signals to encourage water use efficiency and conservation. The 2021 WSCP and its implementation Ordinance No. 21-05, Ordinance of the MNWD Adopting the Water Shortage Contingency Plan and Prescribing Water Conservation Rules and Regulations (Ordinance No. 21-05) was a mechanism by which the Board of Directors may implement varying stages of required water use reductions resulting from conditions under which normal water usage levels cannot be met, and impose conservation penalties on water usage in excess of such amounts as a penalty for the failure to comply with such requirements (“Conservation Penalties”). Using the Conservation Penalties for failure to reduce water use as required by the District in times of water shortage in accordance with this WSCP, and Ordinance No. 26-02 empowers customers to personalize decisions on how best to use water. The 2015 WSCP was presented in the form of an ordinance (15-01) to give the District the ability to issue penalties if a customer was in violation of an implemented water shortage stage. The 2021 WSCP was updated in December 2021 in accordance with CWC Section 10632(a) to include the required WSCP elements and contains six water shortage stages that provide an increasing scale of water use response actions. Ordinance No. 26-02 prescribes water conservation rules and regulations to enable the District to enforce its shortage response actions specified in Chapter 5 herein.

The District will require that customers reduce water use in the event of a declared water shortage and will impose Conservation Penalties as described herein and in Ordinance No. 26-02 for failure to meet these requirements. The 2026 WSCP is being updated to address new requirements of water suppliers related to nonfunctional turf as defined in Section 10608.12 and 10608.14 of the California Water Code.

Section 1.2 Organization of this Document

The WSCP covers the following required elements as set forth by CWC Section 10632:

- **Chapter 1** – Provides an introduction of the WSCP and organization of this document.
- **Chapter 2** – Provides a summary of the water supply analysis and water reliability findings from the latest UWMP.
- **Chapter 3** – Provides a description of procedures to conduct and approve the Annual Supply and Demand Assessment.
- **Chapter 4** – Provides an explanation of the WSCP’s six standard water shortage levels corresponding to ranges of up to 10, 20, 30, 40, 50, and more than 50 percent shortages.
- **Chapter 5** – Provides a description of the WSCP’s shortage response actions that align with the defined shortage levels.
- **Chapter 6** – Identifies the District’s communication protocols and procedures to inform customers, the public, interested parties, and local, regional, and state governments, regarding any current or predicted shortages and any resulting shortage response actions.
- **Chapter 7** – Identifies the compliance and enforcement measures the District will implement to achieve a reduction in water use.
- **Chapter 8** – Provides a description of the legal authorities that enable the District to implement and enforce its shortage response actions.

- **Chapter 9** – Provides a description of the financial consequences of and responses for each supply shortage stage.
- **Chapter 10** – Identifies how the District will monitor and report water use to ensure the shortage response actions are being achieved.
- **Chapter 11** – Identifies reevaluation and improvement procedures for evaluating the functionality of the WSCP and describes the process to adopt, submit, and amend the WSCP.
- **Chapter 12** – Identifies and defines special water features.
- **Chapter 13** – Identifies the plan, adoption and submittal process for the WSCP.

Chapter 2 Water Supply Reliability

Section 2.1 Water Supply Reliability Analysis

This section summarizes key components related to water system reliability conducted pursuant to CWC Section 10635. The District continues to prioritize water reliability and developing projects or programs to meet customer demands as identified in its most recent Long Range Water Reliability Plan. The Long Range Water Reliability Plan is the District's long-term plan to assure adequate water supplies for its customers. However, during periods of extreme drought or emergencies, water shortages may occur from time to time that will require implementation of programs that temporarily reduce water use. The purpose of this WSCP is to provide direction on specific actions to be taken by District staff and customers in response to severe water supply shortage conditions. This WSCP describes the conditions that constitute a water shortage and provides actions for managing water supply and demands during a declared water shortage. Whatever the magnitude of shortfall the District may experience, the WSCP has the following goals:

- Conserve the District's water supply for the greatest public benefit;
- Mitigate the effects of a water supply shortage on public health and safety, economic activity, and customer lifestyle; and
- Utilize the individualized water budgets to encourage available water supplies to be used for the most essential purposes for the duration of the water shortage.

Section 2.1.1 Water Reliability Threats

Critical to the WSCP is understanding how reliability threats could impact the District and its ability to meet the needs of its customers. Imported water supplies are susceptible to system and supply reliability disruptions. System reliability is the ability to meet customer demands during unplanned emergency outages (e.g., seismic events, facility failures, and other catastrophic events) of key facilities. Supply reliability is the ability to meet customer demands during hydrologic variability (e.g., drought and high temperatures) and long-term changes in available imported water supply. Both system and supply reliability disruptions impact the District's ability to serve its water customers.

Deliveries of imported supplies are dependent on an extensive network of facilities used to acquire, treat, pump, store, and convey imported supplies to the District. Water systems are vulnerable to seismic events (as well as other unplanned facility failures and catastrophes) that could result in varying degrees of water supply disruptions for periods of days, weeks, or months. Given the presence of several major earthquake fault lines in proximity to MWD facilities, earthquakes have a high potential for resulting in an infrastructure outage that could disrupt service to and within the District. System reliability disruptions for the District can be caused by outages of key water facilities, such as MWD's Robert B. Diemer Water Treatment Plant (Diemer WTP) located north of Yorba Linda which delivers water to the District, as well as conveyance and distribution pipelines, such as the East Orange County Feeder No. 2 (EOCF2), or Allen McCollough Pipeline (AMP).

Supply reliability disruptions can be caused by droughts, environmental regulations resulting in restrictions in water exports from the Sacramento-San Joaquin River Delta (Delta), seismic risks to levees in the Delta that protect it from seawater intrusion, and long-term climate variability. Of the many factors affecting supply reliability, the factor with the greatest degree of variability and with the largest

impact on supplies is climate variability and associated effects on hydrology. Climate variability adds a layer of uncertainty in estimating the future availability of imported water. While different climate change models show differing effects, potential changes could include more precipitation falling in the form of rain rather than snow and earlier snowmelt. Earlier snowmelt would result in more runoff occurring in the winter rather than spread out over winter and spring, which in turns impacts supply availability during late spring and summer. **Figure 2-1** depicts some of the potential reliability disruptions to the District service area.

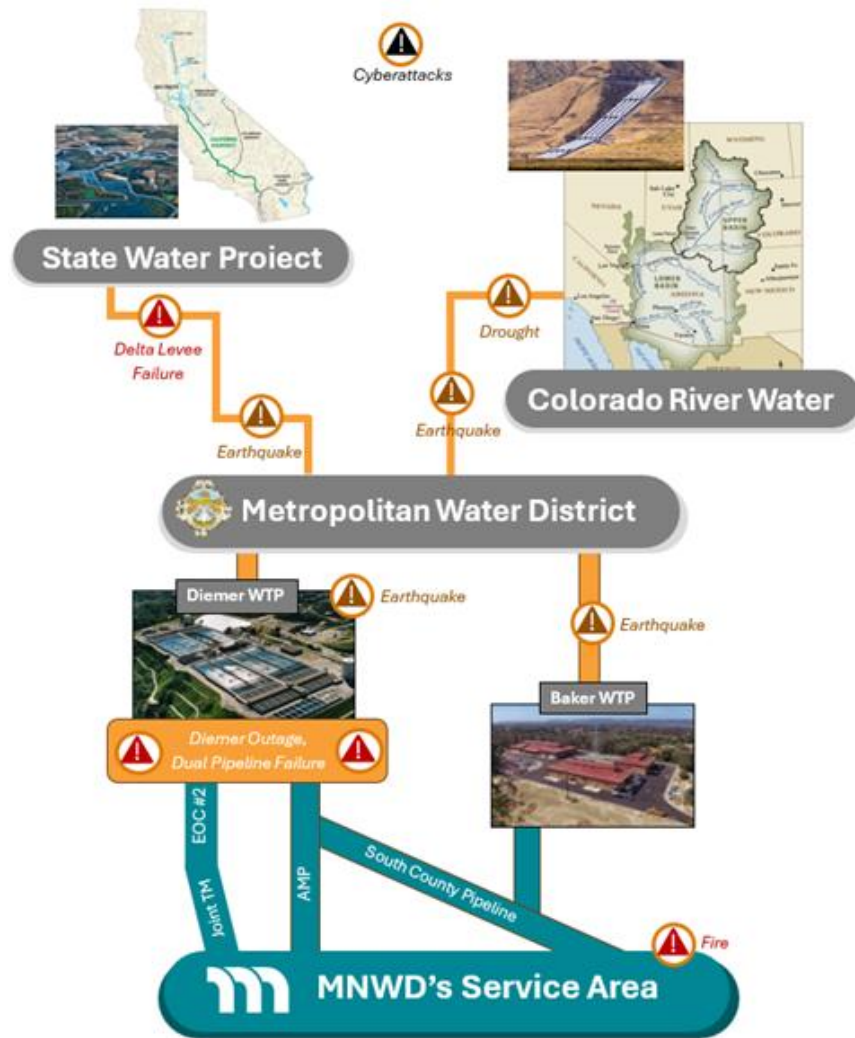


Figure 2-1. Water Delivery Supply and System Risks Representation

Section 2.1.2 Reductions in Water Supply

A water shortage occurs when water supply is insufficient to meet water demands. Reductions in water usage may be necessary to respond to any significant impacts that may reduce the available water

supply to the District, including but not limited to shortages arising from the following specific circumstances or events:

- (1) MWD and/or MWDOC, the District's wholesale water supplier, has determined that a drought, water shortage, or water shortage emergency exists or threatens to exist or has implemented or taken other actions requiring a reduction in water demand;
- (2) MWD Water Supply Allocation Plan implementation or other actions resulting in a reduction in water supply;
- (3) The State has determined that a drought, water shortage, or water shortage emergency exists;
- (4) The State has implemented restrictions on the use of water or reduced or restricted the delivery of wholesale water to the District;
- (5) Regional or statewide importation or local distribution systems or facility(ies) have failed or have been shut down (e.g., a main break, reservoir, pipeline, canal, or other distribution or conveyance system failure);
- (6) Alternative water supplies are limited or unavailable; and,
- (7) Any other natural disaster that impacts the availability of water supply to the District.

Section 2.2 Water Service Reliability

CWC Section 10632(a)(1) directs the WSCP to include an “analysis of water supply reliability conducted pursuant to CWC Section 10635,” which requires an assessment of the reliability of its water service to customers in five-year increments, for three hydrologic conditions (1) a normal water year, (2) a single dry water year, and (3) a drought lasting five consecutive water years as well as a drought risk assessment. The water service reliability and drought risk assessment are contained within the UWMP, Section 7 and Section 8 and are incorporated herein (MNWD, 2026). A summary of the results is included herein. Because the District has relied on imported water supplies (in addition to recycled water) to meet its demands, the reliability levels during all hydrologic year types presented in Sections 7 and 8 of the District’s UWMP reflect MWD’s determination of its ability to reliably meet the demands of its member agencies. Notably, the MWD 2025 UWMP determines that MWD can meet the current and projected full service demands of its member agencies under all three hydrologic conditions through 2050 by developing and implementing water resources programs and activities through its Climate Adaptation Master Plan for Water (CAMP4W) Implementation Strategy (MWD, 2026). This strategy includes conservation; local resources such as recycled water and groundwater recovery; Colorado River supplies and transfers; SWP supplies and transfers; in-region surface reservoir storage; in-region groundwater storage; and out-of-region banking, treatment, conveyance, and infrastructure improvements.

As detailed in Section 7 of the District’s UWMP (MNWD, 2026), the District can meet customers’ demands in all hydrologic year types through 2045, even with a potential increase in dry year demands. The reliable supplies reflect not only regional projects and comprehensive water supply planning by MWD and MWDOC, but also the forward-thinking planning and efforts the District has undertaken to develop its recycled water supplies and conservation programs, thus greatly reducing reliance on imported supplies.

Chapter 3 Annual Water Supply and Demand Assessment Procedures

Section 3.1 Annual Supply and Demand Assessment

Pursuant to CWC Section 10632(a)(2), the District must include in its WSCP the procedures used for conducting an annual Water Supply and Demand Assessment (Annual Assessment). This chapter describes:

(A) the written decision-making process that the District will use each year to determine its water supply reliability, and

(B) the key data inputs and assessment methodology used to evaluate the District's water supply reliability, including:

- (i) current year unconstrained demand, considering weather, population growth, and other influencing factors such as policies used to manage current supplies to meet demand objectives in future years;
- (ii) current year available supply, considering hydrological and regulatory conditions in the current year and one dry year;
- (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) description and quantification of each source of water supply.

The Annual Assessment is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year. This determination is based on information available to the District at the time of the analysis. CWC Section 10632(a)(2)(B)(ii) requires the Annual Assessment to determine "current year available supply, considering hydrological and regulatory conditions in the current year and one dry year." Since 2022, the District conducts an annual water supply and demand assessment pursuant to CWC Section 10632(a) prior to July 1 of each year.

Section 3.1.1 Data and Methodologies

Section 3.1.1.1 Sources of Supply

The District's current water needs are met by a combination of imported potable water and recycled water. Recycled water supply is locally sourced. The District is an urban retail water provider dependent on imported supplies of potable water via MWD through its member agency, MWDOC, a wholesale importer of water from MWD. MWD's principal sources of water supplies are the State Water Project and the Colorado River. MWD receives water delivered from the State Water Project under State Water Contract provisions, including contracted supplies, use of carryover storage in San Luis Reservoir, and

surplus supplies. MWD holds rights to a basic apportionment of Colorado River water and has priority rights to an additional amount depending on availability of surplus supplies. Water management programs supplement these Colorado River supplies. To secure additional supplies, MWD has groundwater banking partnerships and water transfer and storage arrangements within and outside its service area. Refer to Section 6 of the District's UWMP, incorporated herein, for additional details on the District's water supply sources. The District regularly coordinates with MWDOC and MWD regarding supply projections and potential shortages as part of its overall planning efforts. The annual evaluation process is conducted in steps to determine if a regional demand reduction is needed, and if so, at what level.

Section 3.1.1.2 Supply

On an annual basis, the District performs an evaluation of its imported water supply. The District conducts an analysis based on the MWD Water Surplus and Drought Management update and MWDOC Water Supply Condition Update report to review supply and demand conditions and evaluate projected water supply availability and estimated demand for the following year based on the current hydrologic conditions. To determine imported water supplies available to the District on an annual basis, the District coordinates with MWDOC and MWD regarding projected supplies. MWD water supplies available to MWDOC vary based on hydrologic conditions of that year and the corresponding State Water Project's Table A Allocations, and Colorado River Drought Contingency Operations. MWD and MWDOC undertake an analysis to determine whether water supplies will be deficient relative to estimated regional water demands for the year. MWD then evaluates whether the amount of water in storage will be sufficient to meet regional demands. The District reviews the monthly MWD Water Surplus and Drought Management update which provides a preliminary accounting of water supply, demand, and storage conditions. The District also reviews the monthly MWDOC Water Supply Condition Update report that tracks climate conditions and anticipated water supplies available to the region. Final supply projections are typically available by June of each year. Should MWD or MWDOC identify a potential regional supply shortage and implement their respective Water Supply Allocation Plans (WSAP), the District will also implement water conservation and water shortage response measures, as deemed necessary by the Board of Directors. Absent implementation of the MWD WSAP or MWDOC WSAP, no supply shortages for the year would be anticipated.

In addition, supply conditions that may be considered include, but are not limited to:

- (1) District water supply conditions and storage levels;
- (2) Statewide water supply conditions;
- (3) MWD storage levels;
- (4) Local water supply and demand conditions;
- (5) Actions by surrounding wholesale and retail water agencies; and
- (6) Any other conditions the General Manager believes will adversely affect the District's available water supply.

Section 3.1.1.3 Infrastructure Considerations

The Annual Assessment will consider any infrastructure issues that may pertain to near-term water supply reliability, including repairs and construction that may temporarily constrain capabilities, as well as any new projects that may add to system capacity, both at the local and regional level. In addition, the District coordinates with MWDOC and MWD to identify MWD shutdowns that may impact supply reliability and allow the District to plan accordingly. In the event the District anticipates that an infrastructure issue is likely to impede the District's capability to distribute water during the current year, the issue would be documented, and the determination of water reliability in the Annual Assessment would be adjusted accordingly.

Section 3.1.1.4 Other Factors

Water quality is of paramount importance to water supply reliability. Every year, the District conducts approximately 12,000 water quality tests that are independently analyzed at state-of-the-art laboratories. District staff work diligently to ensure that our drinking water complies with the science-based water quality standards set by the Environmental Protection Agency and the State Water Resources Control Board. For the Annual Assessment, any known issues related to water quality will be considered for their potential effects on water supply reliability.

Section 3.1.1.5 Unconstrained Demand

For the purpose of the Annual Assessment and WSCP, CWC Section 10632(a)(2)(B)(i) directs the District to use current year "unconstrained demand" when assessing water supply reliability. The WSCP and Annual Assessment define unconstrained demand as expected water use in the upcoming year, based on recent water use, and before any projected shortage response actions that may be taken under the WSCP. Unconstrained demand is distinguished from observed demand, which may be constrained by preceding, ongoing, or future actions, such as emergency supply allocations during a multi-year drought. WSCP shortage response actions to constrain demand are inherently extraordinary; routine activities such as ongoing conservation programs and regular operational adjustments are not considered as constraints on demands.

The District will forecast unconstrained demands based on evaluating trends using a 3-year moving average of annual demand and adding a 5 percent contingency to be conservative in water needs for the following year. The District will adjust its near-term demand forecast for the Annual Assessment to account for extraordinary demand management measures that the District may have already put into effect for the current year. Extraordinary demand management measures may include intensified communication and public outreach to its customers through implementation of the District's WSCP. Non-extraordinary water savings from regular conservation and community outreach activities are considered part of the District's normal demands and are not counted again for assessments of unconstrained demand.

Section 3.1.1.6 Evaluation Criteria

Because shortages are based on the difference between expected supplies and unconstrained demand under assumed current year and dry year conditions, the locally applicable evaluation criteria to be used in the Annual Assessment for determining a shortage includes the following:

- Estimation of available supplies for current year and dry year scenarios (as described in Section 3.1.1.2).
- Estimation of unconstrained demands for current year and dry year scenarios (as described in Section 3.1.1.5).

Demands are then compared to projected imported supplies to determine if a shortage is projected. These criteria findings will also be given additional context and influenced by infrastructure considerations and other factors discussed above which will differ from year to year. Should a supply gap be projected, the water shortage stage would be based on the severity of the supply gap. If a regional shortage exists, the next action is to determine the appropriate shortage response level and actions for the District. District staff will present a completed Annual Assessment determination for approval by the District's General Manager. Upon approval, District staff will then formally submit the Annual Assessment to the California Department of Water Resources by July 1. The Annual Assessment Report will document any anticipated shortage, any triggered shortage response actions, associated compliance and enforcement actions, and communication actions.

Section 3.2 Decision-Making Process

This section describes the decision-making process the District will use each year to determine and report to the State its water supply reliability. The results from this process will also determine how the District declares water shortage levels and associated response actions.

The District's decision-making process begins with an assessment of its water demand and the availability of imported supplies from MWD to determine if supplies are sufficient to meet demands. The District also includes a review of water quality and local and regional infrastructure issues to determine possible limitations to supply availability. If water supplies are sufficient to meet forecasted demands, no water shortage stages would be triggered.

In the event that demands cannot be met with available water supplies and MWD is in allocation, limiting available supplies for purchase with penalties, the District will evaluate the severity of the allocation and the resulting regional supply shortage level. The District would analyze how much supply is available to its customers and would assess a shortage level based on expected supply shortages and enter the appropriate corresponding shortage level, as outlined in Section 3.3, Declaration of Water Shortages.

Section 3.3 Declaration of Water Shortages

The implementation of any given stage of the WSCP requires an action by the District's Board of Directors. Based on the results of the Annual Assessment, and if deemed necessary, the General Manager will present recommended conservation measures for the Board of Directors to consider during periods of a water shortage based on the best information available at the time. Recommendations are provided on the implementation and/or termination of water shortage stages. The declaration of any water shortage stage will be through the adoption of a resolution of the Board of Directors only after a public hearing at which customers have an opportunity to be heard to protest the declaration and to present their respective needs to the Board of Directors in accordance with CWC

Sections 350-359. Notice of the time and place of the public hearing shall be published pursuant to Section 6061 of the Government Code at least seven days prior to the date of the public hearing in a newspaper printed, published, and circulated within the area in which the water supply is distributed, or if there is no such newspaper, in any newspaper printed, published, and circulated in Orange County (CWC Section 351-352).

The water shortage stage and required response actions designated becomes effective as determined by the Board of Directors and specified in the resolution. After adopting the resolution, the declaration of the Board of Directors of the water shortage emergency shall be made by public announcement on the District's website and shall be published a minimum of one time in a newspaper of general circulation. As water supply conditions either deteriorate or improve, the General Manager will return to the Board of Directors to recommend, as appropriate, revising the appropriate water shortage stage of response. The General Manager may recommend transitioning to the next higher stage if the reduction efforts at the current stage do not achieve the needed result or conversely to a lower stage if smaller demand reductions are determined to be needed. A water shortage ends when supplies improve to the point where the water system can support normal water demand. The WSCP stage in effect at the time must be officially rescinded by the Board by way of a resolution and public notice is given that the water shortage is over.

Section 3.3.1 Determination of Immediate Emergency

In the event of an immediate emergency, requiring action that cannot be delayed until the Board of Directors can meet, the General Manager has the authority to implement such provisions of this WSCP and Ordinance 26-02. The provisions shall be implemented upon the General Manager's written determination that the District cannot supply adequate water to meet the ordinary demands of water consumers and that such implementation is necessary to protect public health and safety.

- (1) The implementation of any such provisions shall take effect immediately upon making a public announcement of the immediate emergency and publication of such immediate emergency on the District's website.
- (2) Such written determination shall be delivered to the Board of Directors as soon thereafter as practical and considered at a general or special Board meeting for review, revocation, or ratification. Such meeting shall be held upon the earliest date when a quorum of the Board of Directors is available.
- (3) At the Board of Directors meeting, the General Manager shall update the Board of Directors on the severity and length of the immediate emergency.
- (4) During an immediate emergency, the District may specify temporary restrictions on the use of potable and recycled water. Any person who willfully fails to comply with those temporary restrictions may be subject to an administrative penalty of \$500 per offense and have his or her water meter locked by the District.

The District has invested in several regional projects to support system reliability in the event of an earthquake or power outage, including the Baker Water Treatment Plant and Upper Chiquita Reservoir. These infrastructure improvements for system reliability have increased the average annual days of reliability to more than 43 days with an assumed 20% reduction in demands, in response to shortage or emergency outage. The average annual days of reliability fluctuates based on storage levels and customer demands. The District's 2025 Water Reliability Policy goal is at least 31-days and up to 60-days annual average potable water supply to meet demands in the event of an outage of treated import water. The District continues to invest in water reliability to increase the days of water reliability to support customers in the event of an outage.

Chapter 4 Six Standard Water Shortage Stages

Section 4.1 Stages

CWC Section 10632(a)(3)(A) identifies six standard water shortage levels corresponding to progressive ranges of up to 10, 20, 30, 40, 50 and greater than 50 percent shortage from the normal levels of supply availability. Each of the shortage levels represent an ever-increasing gap between normally available supplies and normally expected customer water use. The overall concept is that water shortages of different magnitudes require different measures to overcome the deficiency. This section establishes the stages of escalating response to short-term and long-term water shortages.

The District's WSCP includes six stages; each stage is associated with a water conservation target and applies to both long-term supply shortages and catastrophic interruptions of water supplies. **Table 4-1** describes the various stages and corresponding shortage levels. Stage 1 results in voluntary and some mandatory reductions while Stages 2 through 6 result in required actions. The District will implement the appropriate stage based on assessed water supply and demand conditions. It shall not be necessary to implement any water shortage stage prior to another; the water shortage stages may be implemented in any reasonable order as determined by the Board. Higher stages will be implemented if additional demand reductions are required to address increasing water supply shortages. Each stage consists of specific response actions and penalties to encourage the appropriate level of conservation.

Table 4-1: WSCP Level and Corresponding Shortage Level

WSCP Stage	Percent Supply Reduction	Customer Action Type
1	≤10%	Voluntary and Mandatory
2	10 – 20%	Mandatory
3	20 – 30%	Mandatory
4	30 – 40%	Mandatory
5	40 – 50%	Mandatory
6	≥50%	Mandatory

Chapter 5 Shortage Response Actions

This section describes the six-stage approach and overall strategy for dealing with water shortages and presents the recommended menu of actions for reducing water demand during a declared water shortage, including shortage response actions that align with defined shortage levels. Each stage includes a set of demand reduction measures that become progressively more stringent as the shortage condition escalates. This WSCP strives to balance available supplies in times of shortage as much as possible through reductions in outdoor water use. At each stage, public health and sanitation usage is afforded the highest priority by cutting back on indoor water use the least. **Table 5-1** provides a summary of the water shortage stages and the response actions implemented in each stage to reduce demand to meet supply levels.

Section 5.1 Response Actions

Shortage response actions included in this WSCP are a combination of locally appropriate Best Managements Practice (BMPs), demand reduction methods, including penalties, supply augmentation, and operational change measures. Each of these actions are further described in the following sections. To determine the additional specific actions that should be taken at each level, the District will evaluate conditions specific to the timing, supply availability, and cost, along with other pertinent variables at the time a WSCP stage is implemented. Numerous variables can influence the supply reduction levels during a water supply shortage. These variables include, but are not limited to, State Water Project allocation, conditions on the Colorado River, MWD storage supplies, local storage, local demands, and season. The recommended actions to reduce water use are presented below. It is meant to inform the public and decision-makers about the types of measures the District would implement under various water shortage stages but should not be construed as limiting other possible options. Specific circumstances will vary with each shortage, and decisions about the most appropriate response would be based on the water supply and demand conditions at the time and the judgment of the General Manager and approved by the Board. These measures are intended as a list of probable measures for advance preparation purposes rather than a set of measures to be strictly followed, recognizing that as supply and demand change over time, the ultimate decision of actions to address the shortage may also change. Depending on the situation, the Board may not implement each of the identified actions in a response level but select only those that are appropriate. In addition, the Board may adopt additional actions not listed below. It is important to recognize that flexibility in selecting the most appropriate stage may be needed.

Section 5.1.1 Demand Reduction

This section presents the locally appropriate actions for reducing demand during a declared water shortage. The District always requires adherence to Water Conservation BMPs (or permanent water waste prohibitions) which are listed in Section 5.1.4 Permanent Water Conservation Requirements – Prohibition Against Waste and Section 5.1.5 Other Water Conservation Measures Available for Implementation. The WSCP response actions are considered in addition to these mandatory Water Conservation BMPs.

The focus of this plan is primarily on measures that reduce demand. Each stage includes a set of demand reduction measures that become progressively more stringent as the shortage condition escalates. This WSCP strives to balance available supplies as much as possible through:

- **Public Education Campaigns:** The District would implement a multi-channel outreach and education campaign to encourage customers to take action to reduce water use.
- **Expanded Outreach for Water Efficiency Programs:** Water efficiency programs provide customers with the means and guidance to lower their water usage. Customer-friendly programs, rebates and incentives, direct installation options and strong support services drive stronger response rates.
- **Conservation Penalties:** During Stages 2 through 6, customers will be required to reduce water usage, and a Conservation Penalty will be levied on customers for each hundred cubic foot (HCF), or portion thereof, of water used in excess of those amounts, as defined in each stage. The Conservation Penalty shall be in addition to the volumetric charge the District collects for the potable water or recycled water delivered.

At each stage, the District would initiate an increasingly focused public education campaign that calls for actions to reduce water waste and provides the tools necessary to participate in the District's water efficiency programs. Beginning at Stage 2, the WSCP requires customers reduce water use in the "upper" tiers of their calculated water budget. The District provides a five-tier water budget structure to single-family and multi-family residents and a four-tier water budget structure to its non-residential (e.g., commercial, potable water irrigation, and recycled water irrigation) customers (refer to **Table 5-1** below). The total water budget for residential customers consists of Tiers 1 and 2, in which Tier 1 is the monthly calculated indoor water budget and Tier 2 is the monthly calculated outdoor water budget. The total water budget for non-residential customers is represented by Tier 1. The requirements to reduce water use focus on reductions in over-budget outdoor water use first. At each stage, public health and sanitation usage is afforded the highest priority by requiring customers to reduce indoor water use only at the last Stage 6, if needed. Customers that do not reduce water usage as required by the District will be subject to Conservation Penalties in accordance with the WSCP stage. A summary of the shortage response actions in each stage is summarized in **Table 5-2**. A complete list of all actions for each customer class in each stage is summarized below.

Table 5-1: Water Budget Tiers

Tiers	Residential Allocation	Commercial, Recycled and Irrigation Allocation
1	Indoor Water Budget	Total Water Budget
2	Outdoor Water Budget	101-125% Total Water Budget
3	101-125% Total Water Budget	126-150% Total Water Budget
4	126-150% Total Water Budget	Over 150% Total Water Budget
5	Over 150% Total Water Budget	

The WSCP mirrors the District’s integrated 2015 drought response strategy, which received accolades from the State Water Resources Control Board (SWRCB) as a best practice in the industry in rate design and as is included as a case study by the California Department of Water Resources (DWR) in the appendices of the 2025 UWMP Guidebook. A key component of the drought response strategy was public education and outreach. With the 2012 to 2017 drought in California, Governor Brown’s declared state of emergency, and SWRCB mandatory reductions in water use, the District developed a comprehensive public education and outreach strategy to effect reductions in water use. A multi-pronged approach was used to reach as many customers as possible using a variety of messaging platforms and targeting methods. In the 2015 UWMP, the District’s direct communication efforts were plotted alongside a comparison of calendar year 2014 to calendar year 2015 total water production. The 2015 UWMP illustrated the relationship between rates, outreach, and customer understanding to overall water demand reduction. However, it is important to note that direct conclusions should not be drawn but rather the understanding that there is a correlation between customers choosing to use water efficiently and when conservation penalties were paired with outreach and education. It is difficult to estimate the exact amount of demand reductions that could be expected for each action separately and rather all actions work together to produce the necessary reductions along with regional influences on demand reductions; however, estimates for demand reduction actions are provided in Table 5-2 below which are used to bridge potential supply and demand gaps.

Section 5.1.1.1 Stage 1

Water Shortage Stage 1 constitutes a consumer demand reduction of up to 10%. Shortage response actions listed under this stage include:

- **Voluntary Reductions.** During Water Shortage Stage 1 (“Stage 1”), the District’s conservation efforts will be focused on voluntary reductions in potable and recycled water use. Potable and recycled water customers may reduce demand by following the District’s BMPs.
- **Refills of Swimming Pools.** Any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **Mandatory Rules Governing Potable Water Use.** During Stage 1, recycled water customers shall be prohibited from using potable water for outdoor irrigation.

Section 5.1.1.2 Stage 2

Water Shortage Stage 2 constitutes a consumer demand reduction of up to 20%. Shortage response actions listed under this stage include:

- **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 2 (“Stage 2”), all water customers, both potable and recycled, are prohibited from using water in excess of 125% of their calculated water budget.
- **Penalties.** During Stage 2, a volumetric Conservation Penalty will be applied as detailed below and summarized in Chapter 7, Table 7-1. The Conservation Penalty would be based on the effective rates in place at time the water shortage stage is implemented. Such Conservation

Penalty shall be in addition to the water service fees the District charges for the water delivered to the customer. The following penalties would apply to each customer class.

- Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 5 and Tier 4 water rates for each unit of water used in Tier 4.
- Potable Irrigation customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.
- Recycled customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.
- Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 3 water rates for each unit of water used in Tier 3.
- **Refills of Swimming Pools.** During Stage 2, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of their calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Landscaping Bill Adjustments.** During Stage 2, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.3 Stage 3

Water Shortage Stage 3 constitutes a consumer demand reduction of up to 30%. Shortage response actions listed under this stage include:

- **Mandatory Rules Governing Customer Water Budgets.** During Water Shortage Stage 3 (“Stage 3”), all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets.
- **Penalties.** During Stage 3, a volumetric Conservation Penalty will be applied as detailed below and summarized in Chapter 7, Table 7-1. The Conservation Penalty would be based on the effective rates in place at time of the water shortage stage is implemented. Such Conservation Penalty shall be in addition to the water service fees the District charges for the water delivered to the customer. The following penalties would apply to each customer class.
 - Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty equal the difference between the Tier 5 and Tier 3 water rates for each unit of water used in Tier 3.
 - Potable Irrigation customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
 - Recycled customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.

- Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
- **Refills of Swimming Pools.** During Stage 3, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Landscaping Bill Adjustments.** During Stage 3, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.4 Stage 4

Water Shortage Stage 4 constitutes a consumer demand reduction of up to 40%. Shortage response actions listed under this stage include:

- **Reduction of Potable Usage.** During Water Shortage Stage 4 (“Stage 4”), single family residential, multi-family residential, and potable irrigation customers will be assessed the volumetric conservation penalty for water usage in excess of 60% of their outdoor water budget due to reduced water supply availability.
Reduction of Recycled Water Usage. During Stage 4, recycled water customers will be assessed the volumetric conservation penalty for water usage in excess of 90% of their outdoor water budget due to reduced water supply availability.
- **Mandatory Rules Governing Customer Water Budgets.** During a Stage 4, all water customers, both potable and recycled, shall be prohibited from using water in excess of their individually calculated water budgets and the amounts required above.
- **Penalties.** During Stage 4, a volumetric Conservation Penalty will be applied as detailed below and summarized in Chapter 7, Table 7-1. The Conservation Penalty would be based on the effective rates in place at time the water shortage stage is implemented. Such penalty shall be in addition to the water service fees the District charges for the water delivered to the customer. The following penalties would apply to each customer class.
 - Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 60% of the customer’s Tier 2 budget. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between the Tier 5 and Tier 2 water rates.
 - Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 60% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 90% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.

- Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
- **Refills of Swimming Pools.** During Stage 4, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Landscaping Bill Adjustments.** During Stage 4, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.5 Stage 5

Water Shortage Stage 5 constitutes a consumer demand reduction of up to 50%. Shortage response actions listed under this stage include:

- **Reduction of Potable Water Usage.** During Water Shortage Stage 5 (“Stage 5”), single family residential, multi-family residential, and irrigation customers using potable water will be assessed the volumetric conservation penalty for water usage in excess of 30% of their outdoor water budget due to reduced water supply availability.
- **Reduction of Recycled Water Usage.** All recycled water customers will be assessed the volumetric conservation penalty for water usage in excess of 80% of their outdoor water budget due to reduced water supply availability.
- **Mandatory Rules Governing Customer Water Budgets.** During Stage 5, all water customers shall be prohibited from using water in excess of their individually calculated water budgets and the amounts required above.
- **Penalties.** During Stage 5, a volumetric Conservation Penalty will be applied, as summarized below and detailed in Chapter 7, Table 7-1. The Conservation Penalty would be based on the effective rates in place at time the water shortage stage is implemented. Such Conservation Penalty shall be in addition to the water service fees the District charges for the water delivered. The following Conservation Penalties would apply to each customer class.
 - Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 30% of the customer’s Tier 2 budget. The Conservation Penalty for Residential and Multi-Family customers will equal the difference between Tier 5 and Tier 2 water rates.
 - Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 30% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
 - Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 80% of the customer’s Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.

- Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
- **Refills of Swimming Pools.** During Stage 5, any customer who refills a swimming pool shall not receive a bill adjustment for water usage in excess of his or her calculated water budget and shall be billed for water used according to the applicable tier for the corresponding use.
- **New Landscaping Bill Adjustments.** During Stage 5, any person installing new landscaping, shall only receive a bill adjustment during the establishment period for California friendly vegetation as defined by the Water Use Classifications of Landscape Species (“WUCOLS”) to have low or very low watering needs for the South Coastal Region. The classifications can be found at http://ucanr.edu/sites/WUCOLS/Plant_Search/.

Section 5.1.1.6 Stage 6

Water Shortage Stage 6 constitutes a consumer demand reduction of over 50%. Shortage response actions listed under this stage include:

- **Reduction of Potable Water Usage.** During Water Shortage Stage 6 (“Stage 6”), single family residential, multi-family residential, and irrigation customers using potable water will be assessed the full volumetric conservation penalty for outdoor water uses due to reduced water supply availability.
 - All single-family residential and multi-family residential customers will be assessed a volumetric conservation penalty on indoor water usage above 40 gallons per capita per day;
- **Reduction of Recycled Water Usage.** During Stage 6, all recycled customers will be assessed a volumetric conservation penalty on outdoor water usage above 70% due to reduced water supply availability.
- **Mandatory Rules Governing Customer Water Budgets.** During Stage 6, all customers shall be prohibited from using water in excess of their individually calculated water budgets and the required amounts set forth above. All outdoor irrigation with potable water shall be prohibited within the District’s service area.
- **Penalties.** During Stage 6, a volumetric Conservation Penalty being applied, as summarized below and detailed in Chapter 7, Table 7-1. The Conservation Penalty would be based on the effective rates in place at time the water shortage stage is implemented. Such Conservation Penalty shall be in addition to the water service fees the District charges for the water delivered. The following Conservation Penalties would apply to each customer class.
 - Single-Family Residential and Multi-Family Residential customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 40 gallons per person per day of Tier 1 budget. The Conservation Penalty for Single Family Residential and Multi-Family Residential customers will equal the difference between the Tier 5 and Tier 1 rates.
 - Potable Irrigation customers will be subject to a volumetric Conservation Penalty for each unit of water used. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.

- Recycled customers will be subject to a volumetric Conservation Penalty for each unit of water used in excess of 70% of the customer's Tier 1 budget. The Conservation Penalty will equal the difference between the Tier 4 and Tier 1 water rates.
- Commercial customers will be subject to a volumetric Conservation Penalty equal to the difference between Tier 4 and Tier 2 water rates for each unit of water used in Tier 2.
- **Refills of Swimming Pools.** During Stage 6, no customer shall refill a swimming pool.
- **New Landscaping Bill Adjustments.** During Stage 6, no customer shall install new landscaping.

Section 5.1.2 Supply Augmentation

The District has two main options for supply augmentation during emergency situations and during droughts, the emergency services agreement and additional MWD supply purchases, both of which are detailed below. The District is currently working on other emergency and drought supply options, as detailed in the UWMP Chapter 6, Future Supply Options, incorporated herein.

Section 5.1.2.1 Emergency Service Agreement

The District currently has an Emergency Service Agreement with Irvine Ranch Water District (IRWD) and Orange County Water District (OCWD). In 2006, multiple South Orange County (SOC) water agencies entered into a 25-year agreement with IRWD and OCWD to receive water from the IRWD system with subsequent conveyance into the distribution system serving SOC. The program was developed to deal with emergency water system outages or planned shutdown scenarios in which imported supplies normally delivered into SOC are curtailed, eliminated, or unavailable for up to 30 days. The initial term of the Emergency Services Agreement expires in 2031. The Emergency Services Agreement and subsequent operating agreement calls for IRWD to provide up to 30 CFS to SOC water agencies during emergency events (MWDOC, 2019). As part of that operating agreement, the District can be supplied up to 10.9 CFS for 30 days (MNWD, 2026) from IRWD. The maximum incident volume IRWD will supply is 1,768 AF (MNWD, 2015).

Under the agreement, IRWD and the participating agencies jointly constructed various projects to transfer water to the Aufdenkamp Transmission Main and the Joint Transmission Main. Water delivered through the interconnection is MWD water or locally produced water exchanged for MWD water. The option is not designed to address droughts, but only to be used during emergency conditions when MWD facilities are disrupted due to seismic events or unplanned outages. The amount of water IRWD can make available to SOC water agencies during emergencies is diminishing over time as water demands within IRWD increase.

The District is exploring options for developing a second interconnection to the OCWD groundwater basin with the City of Santa Ana. The new interconnection would operate similarly to the existing IRWD interconnection and only be utilized under emergency conditions when MWD facilities are not providing treated imported water.

Table 5-2: WSCP Response Actions by Stage

Water Shortage Stage – Shortage Percentage	Shortage Response Actions	Estimated Maximum Demand Reduction	Response Action Type
Stage 1 – Demand Reduction of up to 10%	Request for voluntary reductions in potable water use through implementation of Conservation Best Management Practices ¹	2,224 Acre-feet	Voluntary
	No bill adjustments for swimming pool refills ¹		Mandatory
	Recycled water customers may not use potable water for outdoor use ¹		Mandatory
Stage 2 – Demand Reduction up to 20%	Customers required to stay within water budget ¹	4,447 Acre-feet	Mandatory
	Conservation Penalty will be applied to all billing units of water used in excess of 125% of the customer's monthly water budget		Mandatory
	New landscaping bill adjustment only granted for newly installed California friendly vegetation ¹		Mandatory
Stage 3 – Demand Reduction up to 30%	Conservation Penalty will be applied to all billing units of water used in excess of 100% of the customer's monthly water budget	6,671 Acre-feet	Mandatory
Stage 4 – Demand Reduction up to 40%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers will be assessed a volumetric conservation penalty on outdoor water usage above 60% of the customer's monthly water budget	8,894 Acre-feet	Mandatory
	Recycled water customers will be assessed a volumetric conservation penalty on outdoor water usage above 90% of the customer's monthly water budget		Mandatory
Stage 5 – Demand Reduction up to 50%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers shall be assessed a volumetric conservation penalty on outdoor water usage above 30% of the customer's monthly water budget	11,118 Acre-feet	Mandatory

Water Shortage Stage – Shortage Percentage	Shortage Response Actions	Estimated Maximum Demand Reduction	Response Action Type
	Recycled water customers will be assessed a volumetric conservation penalty on outdoor water usage above 80% of the customer’s monthly water budget		Mandatory
	Emergency Supply Augmentation, as available		Operational
Stage 6 – Demand Reduction > 50%	Single-Family Residential, Multi-Family Residential, and Potable Irrigation customers will be assessed volumetric conservation penalty on all outdoor water use	12,229 Acre-feet	Mandatory
	Single-Family Residential and Multi-Family Residential customers shall be assessed a volumetric conservation penalty on water use above 40 gallons per capita per day (based on the number of people in the household)		Mandatory
	Recycled water customers will be assessed a volumetric conservation penalty on outdoor water usage above 70% of the customer’s monthly water budget		Mandatory
	All customers shall be prohibited from using water in excess of their individually calculated water budgets and the required amounts set forth above		Mandatory
	No customer shall refill a swimming pool		Mandatory
	No customer shall install new landscaping		Mandatory
	Emergency Supply Augmentation, as available		Operational
Notes: ¹ Response action applies to subsequent stages.			

Section 5.1.2.2 MWD Additional Supply Purchases

Purchasing additional supply from MWD could be used to fill any gaps between projected water demands and existing local supplies during droughts. Water can be purchased from MWD via MWDOC above a member agency's annual allocation amount but is charged in addition to MWD's standard rates for water service. Each member agency has a predetermined amount of water that can be purchased at the supply rate. Purchases more than this limit will be made at the higher supply rate often with a penalty or surcharge. During periods of extreme water supply shortages, MWD utilizes its WSAP to allocate a specific reduced level of MWD supplies as determined by the MWD Board. If MWD member agencies need and purchase water above their allocation amount, substantial allocation surcharges are imposed. Allocation surcharges are only assessed to the extent that an agency's total annual usage exceeds its total annual allocation. The WSAP calculated supply rate encourages the member agencies and their customers to maintain existing local supplies and develop cost-effective local supply resources and implement water efficiency and conservation programs.

Section 5.1.3 Operational Changes

During times of water shortage, it is imperative that the District also review its own operational consumptive uses of water in order to find short-term water saving opportunities.

- **Recycled Water for Non-Domestic Uses.** All water used for construction shall be recycled water. The District will coordinate with developers/contractors to identify available recycled water connection points or determine if the construction of a new recycled water connection point is feasible and cost-effective.
- **Prohibition of Irrigation with Potable Water.** During Stage 6, if determined necessary for compliance, the District may turn off and lock potable dedicated irrigation meters to ensure no water is used during this stage.
- **Water System Pressure Management.** The District may reduce the system pressure in various zones to reduce system leakages and losses as well as decrease the flow through customer connections. Should this occur, the District will continue to monitor system pressure through its supervisory control and data acquisition (SCADA) network to ensure adequate fire protection flow.
- **Retail Water Meters.** The District may adjust the criteria used for retail meter calibration, repair, and replacement that would result in an increase of meter repair and replacements. This would result in a decrease to apparent water loss and thus increased awareness of customer water use.
- **Water Loss Audits.** The District may adjust the frequency and scope of water loss audits to learn how much water is being lost in the system so that operation improvements and maintenance can be prioritized and targeted to maximize water efficiency.

Section 5.1.4 Permanent Water Conservation Requirements - Prohibition Against Waste

The District implements water conservation BMPs to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District's water supplies. The following water conservation BMPs shall be in effect at all times as prescribed by the Board.

Violations of this Section constitute waste and an unreasonable use of water in violation of Ordinance No. 26-02.

- A. Installation of Water Conservation Devices.** No water shall be provided by the District for internal or external use to any residential, commercial, industrial, agricultural, recreational, governmental, or public building or structure of any kind which is constructed or altered and in which either internal or external irrigation or domestic water piping or water fixtures are to be installed, extended, or altered in any way, including, but not limited to, any plumbing, water piping, or water fixtures for which a construction permit is required to be obtained from the County of Orange or its successor, or for which District approval of plans and service applications are required, unless the new, extended, or altered plumbing, water piping, or other water using facilities conform to the requirements and standards of the District's Rules and Regulations.
- B. Standards for Water Conservation Devices.** The required water conservation devices and standards of the District are those set forth in Exhibit "F" to the District's Rules and Regulations. Nothing provided shall be deemed to relieve any person from compliance with the plumbing code of the County of Orange or any other state or local plumbing or building requirements.
- C. Limits on Watering Hours.** Watering or irrigating any lawn, landscape, or other vegetated area with potable water between the hours of 9:00 a.m. and 5:00 p.m. Pacific time on any day shall be restricted, except by use of a hand-held bucket or similar container reasonably used to convey water for irrigation purposes, a hand-held hose equipped with a fully functioning, positive self-closing shut-off nozzle or device may be used during the otherwise restricted period. If necessary, and for very short periods of time for the express purpose of adjusting or repairing an irrigation system, one may operate an irrigation system during the otherwise restricted period.
- D. No Watering During Rain.** Watering or irrigating any outdoor landscapes with potable water during and up to forty-eight (48) hours after one quarter inch ($\frac{1}{4}$ ") rainfall within a twenty-four (24) hour period is prohibited.
- E. Water Efficient Landscapes.** When installing new or renovated landscaping, it is recommended that all customers utilize only low-water demand plants and trees. For recreational use or community space, newly installed or renovated turf should only be functional turf as defined in Section 10608.12 of the Water Code.
- F. No Excessive Water Flow or Runoff.** No person shall cause or allow watering or irrigating any lawn, landscape, or other vegetated area in a manner that causes or allows excessive runoff of potable or recycled water onto an adjoining sidewalk, driveway, street, alley, gutter or ditch, parking lots, structures, non-irrigated areas, or off the property.
- G. No Washing Down Hard or Paved Surfaces.** Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis

courts, patios, or alleys, is prohibited except when necessary to alleviate safety or sanitary hazards, and then only by use of a hand-held bucket or similar container, a hand-held hose equipped with a fully functioning, positive self-closing shut-off device or a low-volume, high-pressure cleaning machine equipped to recycle any water used.

- H. Obligation to Fix Leaks, Breaks or Malfunctions.** Excessive use, loss or escape of potable or recycled water through breaks, leaks or other malfunctions in the water user's plumbing, irrigation, or distribution systems for any period of time after such escape of water should have reasonably been discovered and corrected and in no event more than five (5) days of receiving notice from the District, is prohibited.
- I. Re-circulating Water Required for Decorative Water Fountains and Decorative Water Features.** Operating a decorative water fountain or other decorative water feature that does not use re-circulated water is prohibited.
- J. Limits on Washing Vehicles.** Using potable water to wash or clean a vehicle, including but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or not, is prohibited, except by use of a hand-held bucket or similar container, a hand-held hose equipped with a fully functioning, positive self-closing automatic water shut-off nozzle or a low volume power washer with a fully functioning, positive self-closing shut-off nozzle. This paragraph does not apply to commercial car washes or the washing of vehicle regulations where the health, safety, and welfare of the public is contingent upon frequent vehicle cleaning, such as garbage trucks and vehicles used to transport food and perishables.
- K. Drinking Water Served Upon Request Only.** Eating or drinking establishments, including but not limited to a restaurant, hotel, café, cafeteria, bar, club, or other public place where food or drinks are sold, served, or offered for sale, should only provide drinking water to persons when expressly requested.
- L. Commercial Lodging Establishments Should Provide Option to Not Launder Linens Daily.** Hotels, motels, and other commercial lodging establishments should provide customers the option of not having towels and linens laundered daily. Commercial lodging establishments should prominently display notice of this option in each bathroom using clear and easily understood language.
- M. Installation of Single Pass Cooling Systems.** Single pass cooling systems shall not be installed in buildings requesting new potable water service.
- N. Ceased Installation of Non-Recirculating Water Systems in Commercial Car Washes and Laundry Systems.** Non-recirculating water systems in commercial car washes and laundry systems shall not be installed.
- O. Restaurants Required to Use Water Conserving Dish Wash Spray Valves.** Food preparation establishments, such as restaurants or cafés, shall not use non-water conserving dish wash spray valves.
- P. Swimming Pools and Spa Covers.** Property owners who have a swimming pool or a spa are encouraged to cover the facilities to minimize water loss due to evaporation.

- Q. Water Waste and Unreasonable Water Use Prohibited.** The waste or unreasonable use or unreasonable method of use of water by any person shall be prohibited at all times.
- R. Recycled Water Use Required if Available.** After the District has provided to the user an analysis demonstrating that Recycled Water is available, cost effective, and safe for the intended use, and the user has been given a reasonable time to make the conversion to recycled water, the use of potable water is prohibited unless otherwise granted exemption by the General Manager or their designee.
- S. Water Recycling – New Service.** Prior to the connection of any new service, the District will determine whether recycled water is available and safe for the intended use to supply all or some of the water needed by the user. If available, and safe for the intended use, recycled water must be used.
- T. Nonfunctional Turf.** Irrigating nonfunctional turf (as defined in Section 10608.12 of the Water Code)¹ with potable water is prohibited, except to the extent necessary to ensure the health of trees and other perennial nonturf plantings, or to the extent necessary to address an immediate health and safety need on the property types and as of the effective dates as stated in Section 10608.14 of the Water Code.

Section 5.1.5 Other Water Conservation Measures Available for Implementation

The following water conservation measures may be implemented at any water shortage stage, in addition to, or supplementary to, the shortage response actions set out in Table 5-1 and Sections 5.1.1, 5.1.3 and 5.1.4. The Board may implement any or none of the following measures by resolution at the time of a shortage declaration.

- (1) Large Landscape Areas – Rain Sensors.** Large landscape areas, such as parks, cemeteries, golf courses, school grounds, and playing fields, that use landscape irrigation systems to water or irrigate, must use landscape irrigation systems with rain sensors that automatically shut off such systems during periods of rain or irrigation timers which automatically use information such as evapotranspiration sensors to set an efficient water use schedule.
- (2) Recycled Water for Construction Purposes.** Recycled or non-potable water shall be used for construction purposes when available, feasible, and safe as deemed by the District.
- (3) Water Conserving Plumbing Standards – Change in Service.** Upon the establishment of new water service or a new customer of record for an existing service, all existing plumbing fixtures (including but not limited to toilets, showerheads, and faucets) must be retrofitted exclusively with water-conserving plumbing fixtures. The water use standards permitted will be the stricter of those current standards approved by the California Energy Commission, County of Orange, or the City in which the property is located.

¹ As stated in the California Water Code: “Nonfunctional turf” means any turf that is not functional turf, and includes turf located within street rights-of-way and parking lots.

- (4) Other Measures.** Other measures as may be required by the State or deemed necessary by the Board.

Section 5.2 Emergency Response Plan

A catastrophic interruption may lead to a proclamation of a water shortage and could be any event (either natural or human induced) that causes a water shortage severe enough to classify as a Stage 4 to 6 water supply shortage conditions. To prepare for catastrophic events, the District has prepared an Emergency Response Plan (ERP) in accordance with America's Water Infrastructure Act (AWIA). AWIA Section 2013 requires community (drinking) water systems serving more than 3,300 people to develop or update risk assessments and ERPs. The District's ERP is considered a confidential document and summarized herein. The District's ERP addresses a variety of potential emergency situations directly affecting the District's system. The ERP establishes Incident Specific Response Procedures (ISRP's) for different emergency conditions which outline the steps staff will take to respond to, evaluate, and mitigate the emergency. ISRP's were developed for a variety of water supply interruptions, including, but not limited to power outages; water contamination; earthquakes; flooding; wildfire; loss of water supply; chemical spills; and terrorist events. The District's ERP provides a framework for an organized response to an emergency. The primary objectives of the ERP are to maintain the functionality of the water distribution system, assess the system and if necessary, make rapid repair to any damage, and prevent any further damage. The ERP includes procedures to utilize existing agency resources as well as processes to request support through Water Emergency Response Organization of Orange County (WEROC) (described below), and mutual aid partners via CalWARN. The ERP is designed to align with strategic plans to mitigate the impacts of identified hazards and threats and improve system resilience. These plans include:

- 2025 Moulton Niguel Water System Risk and Resilience Assessment
- 2025 Orange County Regional Water and Wastewater Hazard Mitigation Plan
- Annex H, 2025 Orange County Regional Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan

In 2024 and 2025, a probability-based Risk and Resilience Assessment was conducted for MNWD in accordance with AWIA and the American National Standards Institute (ANSI)/American Water Works Association (AWWA) J100 Standard using the Program to Assist Risk & Resilience Examination software tool. MNWD identified critical assets, which are defined as those assets that if lost would limit or prevent the accomplishment of the agency's mission and the natural and malevolent threats that those assets could potentially face. MNWD also participated the [Orange County Water and Wastewater Multi-Jurisdictional Hazard Mitigation Plan](#) (HMP), described further below (MWDOC 2025).

Section 5.3 Seismic Risk Assessment and Mitigation Plan

Given the great distances that imported supplies travel to reach Orange County, the region is vulnerable to interruptions along hundreds of miles aqueducts, pipelines, and other facilities associated with delivering supplies to the region. The District is a participant (Member Agency [MA]) in the Orange County Water and Wastewater Multi-Jurisdictional HMP. Hazard mitigation plans form the foundation

for a community's long-term strategy to identify vulnerability to natural and man-made hazards. The plans also aim to reduce disaster losses by breaking the cycle of disaster damage, reconstruction, and repetitive damage. According to the federal Disaster Mitigation Act of 2000, State and local governments are required to develop hazard mitigation plans and update them every five years as a condition for receiving certain types of non-emergency disaster assistance. The Risk Assessment in the HMP summarizes the hazards and risks that pose a threat to Orange County, including seismic risk. The seismic risk to the District is summarized in Section 5.3.2. The primary HMP treats the entire County as the planning area and identifies which MAs are subject to a profiled hazard. The Annex was prepared to provide additional information specific to MNWD with a focus on the risk assessment and mitigation strategy (MNWD, 2019). The Annex identifies the mitigation actions, including the priority, hazard addressed, risk, timeframe, and potential funding sources.

Section 5.3.1 Water Emergency Response Organization of Orange County (WEROC)

In 1983, the Orange County water community identified a need to develop a plan on how agencies would respond effectively to disasters impacting the regional water distribution system. The collective efforts of these agencies resulted in the formation of WEROC to coordinate emergency response on behalf of all Orange County water and wastewater agencies, develop an emergency plan to respond to disasters, and conduct disaster training exercises for the Orange County water community. WEROC was established with the creation of an indemnification agreement between its member agencies to protect each other against civil liabilities and to facilitate the exchange of resources. WEROC is unique in its ability to provide a single point of contact for representation of all water and wastewater utilities in Orange County during a disaster. This representation is to the county, state, and federal disaster coordination agencies. Within the Orange County Operational Area, WEROC is the recognized contact for emergency disaster response for the water community.

Two dedicated WEROC Emergency Operations Centers (EOCs) are located within Orange County, with one site located at MNWD Headquarters. Both sites are maintained in a state of readiness if they will be activated following a major emergency disaster. WEROC EOCs are staffed by trained volunteer personnel from the water community. WEROC's Emergency Radio Communication System consists of two mountain-top radio repeaters and several control stations. WEROC is a flexible and dynamic program that continues to make improvements to its emergency preparedness plan, emergency response facilities, and its training program to address new issues as they surface. During a disaster, WEROC will work cooperatively with MWD through their Member Agency Response System to facilitate the flow of information and requests for mutual aid within MWD's 5,100 square mile service area. WEROC also provides updated information to MWD's EOC at Eagle Rock.

Section 5.3.2 Seismic Risk

For the District, the primary system reliability risks are seismic events. Within Southern California, there are several known active faults with varying levels of activity that can generate significant earthquakes and cause widespread damage to infrastructure. The risk of earthquake damage to infrastructure from these active faults is manifested through different seismic hazards, including seismically induced ground shaking, seismically induced ground failure, and surface fault displacement.

In 2015, the United States Geologic Survey (USGS) released the Uniform California Earthquake Rupture Forecast Version 3 (UCERF3), which provides a forecast for the likelihood of rupture for earthquake faults within California. Southern San Andreas Fault was identified as having the highest likelihood (19 percent) of a magnitude 6.7 earthquake or greater in the next 30 years. UCERF3 further states that there is a 93 percent chance of a magnitude 6.7 or greater earthquake occurring on one of the faults within Southern California within the next 30 years, and a 36 percent chance of a magnitude 7.5 or greater earthquake occurring within the next 30 years (MWD, 2018). Earthquakes that have occurred within or near Southern California since 1900 include five strong earthquake events (magnitude 6.0 – 6.9) and three major earthquake events (magnitude 7.0 - 7.9) (MWD, 2020). In 2019, two significant earthquakes events occurred in the region. On July 4, 2019, a magnitude 6.4 earthquake occurred near Ridgecrest, approximately 122 miles north/northeast of Los Angeles. Then on July 5th, a magnitude 7.1 earthquake occurred in the same vicinity (MWD, 2020). While these earthquakes did not cause damage to the MWD service area, they are a reminder that earthquake risk is always present, and that the region must take steps to prepare and respond.

Several major earthquake fault lines intersect with the Diemer WTP and treated imported pipelines that convey water to MNWD. Diemer WTP can be impacted by a seismic event from the Whittier Fault, while regional pipelines (EOCF2 and AMP) can both be impacted during seismic events from the Puente Hills Fault and the Peralta Hills Fault. The San Joaquin Hills fault can also impact the EOCF2 but treated water may be available to be delivered through the AMP to supply water to MNWD. In general, pipelines are more resilient and flexible than water treatment plants, so they can tolerate higher ground accelerations. The Baker WTP is located further away from the active fault lines and is less susceptible to earthquake damage compared to Diemer WTP. The Baker WTP was constructed to provide backup capacity in the event of a Diemer WTP outage. The HMP and Annex document the mitigation strategies for the District relating to seismic events and are incorporated by reference herein.

Section 5.4 Shortage Response Action Effectiveness

As previously stated, this WSCP strives to balance available supplies as much as possible through information education campaigns, requirements to reduce water use and associated Conservation Penalties, and promotion of water efficiency rebates.

The District's water budget-based rate structure consists of five tiers for residential customers, which comprise the majority of the District's customers; the first two tiers make up the base allocation, while the remaining three tiers are comprised of usage in excess of the base allocation and are subject to conservation charges. The advantage of the water budget-based rate structure is the ability for the District to define efficient consumption for each individual and assign increasing disincentives for wasteful use above the base allocation. The water budget-based rate structure creates a pricing incentive to stay within the individually determined efficient water budget with relatively high rates steadily increasing into the upper tiers. This sends the signal to customers that everyone has less water to use and pushes customers into the higher tiers to provide disincentive for noncompliance.

The Conservation Penalty is imposed on a volumetric basis and is in addition to volumetric consumption charges. The specific requirements to reduce water use, and Conservation Penalty will depend on the stage of water shortage, customer class, and amount of inefficient water use. Unlike traditional water rate structures wherein users are billed at either a uniform rate or specific rate tiers common to all users, water budget-based rate structures employ a scientific and policy-based methodology to determine a reasonable amount of water needed for each water user within a water system for indoor and outdoor usage. Developing water budgets within an agency provides customers with valuable information on a reasonable amount of usage for their household, as well as their usage trends. Rates based on water budgets send a price signal to water users that is directly tied to their usage efficiency, as tiers based on water budgets generally increase in cost as users approach or exceed their budgeted allotment.

The usage trends and data derived from water budgets are also very useful in analyzing District's plans including the WSCP that may affect District customers. The WSCP methodology used is to lower outdoor usage in the WSCP stages with the logic that outdoor usage has more elastic demand, hence, on the margin, customers are more willing to reduce outdoor use first. Elasticity of demand refers to the degree to which demand responds to a change in another economic factor, such as price. In the more extreme upper WSCP stages, the indoor allocation would be assessed the volumetric Conservation Penalty to provide incentive for further demand reduction. The District had great success in linking the water budget-based rate structure to its WSCP to utilize the water budget rate structure to send drought messaging in 2012-2017. Further, the funds generated by the Conservation Penalty are tracked separately from the General Fund revenue and contribute to the Water Use Efficiency Fund that funds the District's water supply reliability and water efficiency and conservation programs.

The ability of a water agency to target a specific end use and, through policy, reduce usage is highly dependent on the current efficiency of the agency's customers. For instance, further reductions for customers who already are at the theoretical limits of outdoor irrigation efficiency would essentially require those customers to harm their landscapes to meet further water use reductions. In addition, a water agency in aggregate can be highly efficient in end uses and still have a small contingent of wasteful users. For instance, in a water budget-based rate structure, the wasteful users pay high water rates, which then fund conservation programs that allow customers to switch to cutting edge low water use technology and native landscapes. A 2016 study by Mukherjee et al. found that the urgency of decreasing water demand in California requires effective pricing mechanisms, and cited MNWD as an example of an agency which has effectively established conservation-based water rates while complying with Proposition 218 requirements. A 2019 study by the Environmental Finance Center at the University of North Carolina at Chapel Hill found that rate structures adopted by California water agencies during the recent drought influenced price signals, and that both rates themselves and elements of the rate structure were necessary to create price signals that incentivize conservation (MWDOC, 2020).

In 2008, DWR selected MWDOC for an Urban Drought Assistance Grant and corresponding study to estimate savings in household water consumption which can be attributed to adoption of water budget-based rate structure by MWDOC member agencies under the DWR grant study. The District participated

in this study given the conversion to the water budget-based rate structure. The Water Budget Evaluation Study Five Year Monitoring Report was completed in 2020 to fulfil the five-year reporting requirement of the agency's 2008 Urban Drought Assistance Grant agreement with DWR. The study concluded that a 1% increase in water price was associated with a decrease in water demand of 2.4% for MNWD's residential customers (MWDOC, 2020). The study also concluded that simply communicating information to households about their water usage and efficiency relative to a reasonable, science-based budgeted allocation can result in savings.

Based on the price elasticity identified in the MWDOC study, the District undertook an analysis to determine how much demand reduction could be expected through implementation of the Conservation Penalties in each of the WSCP stages. Each stage assumes a reduction in water usage for residential and potable irrigation accounts focusing first on outdoor water use reductions, though it should be noted that there is uncertainty in predicting the actual water reductions in other customer classes and other types of water use that will likely occur during each water shortage stage. It is assumed that the amount of reduction would vary by customer since a customer's ability and willingness to reduce water usage depends on the use of the water and their characteristics that can influence their use, the policies being applied to that customer class, and ultimately the price signal they receive. The analysis assumed that not all the water usage targeted by the WSCP rate policies was eliminated; rather that some of the targeted water usage would shift to the next higher tier, increasing the price signal a customer would receive through their bill but not necessarily a signal strong enough to encourage major change. Past data derived from water budgets and customer consumption trends show that a majority of MNWD customers stay within their water budgets. To summarize, the analysis follows a robust methodology by incorporating demand response to price signal from past studies, customer characteristics and historical usage data of MNWD customers controlling for relevant factors that would determine demand reductions in WSCP stages.

Chapter 6 Communication Protocols

The District conducts communications and outreach regarding water supplies and water use efficiency as an ongoing activity during normal supply conditions. However, clear and effective communications between the District and its stakeholders become even more important if supply conditions become abnormal and the District needs to activate its Ordinance No. 26-02. Communication during a water shortage is critical to relay information to employees, other government agencies, customers, the public, the media, and others about potential risks to our water supply, and how the District is responding to those risks. Public outreach programs can help increase awareness of water shortages, while customer services and water efficiency programs can encourage customers to actively participate in demand reducing strategies. Primarily, the District relies on robust information sharing and the generation of awareness related to water shortage conditions and the conservation measures that exist for the relevant stage. Effective communication is essential to the success of the implementation of the WSCP and its implementing Ordinance No. 26-02 in achieving the desired water use reductions. A strong communication plan will educate customers on the water supply situation. All stakeholders need to be adequately informed about water supply conditions, understand the need to use water wisely, and know what actions they are being requested or required to take to mitigate the shortage. Prior to a formal declaration of a water shortage, the District will provide stakeholders with as much advance notice as possible. In addition, the more severe the shortage, the more robust public information campaign will be needed. The public communications strategy will be consistent with the District's Crisis Communication Plan.

Section 6.1 Crisis Communication Plan

The District created a Crisis Communication Plan (MNWD, 2021) that provides an approach to assist in effectively managing and communicating during an emergency or crisis, including during a water shortage stage. The Crisis Communication Plan outlines the District's guidelines and instructions for communicating during an emergency or crisis. The District aims to provide crisis related information in a timely and accurate manner to enhance understanding of a water supply conditions, build trust and credibility, encourage constructive dialogue, and provide guidance on appropriate protective actions. Good communication procedures outlined in the Crisis Communication Plan will guide staff on when and how to communicate (e.g., who is responsible for notifying the crisis communication team and outside agencies, and what information should be relayed), who should be notified, and what platform to deliver messages (e.g., various communication channels). The Crisis Communication Plan includes the various channels the District will utilize to convey critical messages regarding water shortage allocations and voluntary and mandatory actions. Use of all forms of media may be employed, which could include public service announcements on radio and cable television, social media as well as earned media, and advertisements in local newspapers. The Crisis Communication Plan will be used to distribute information to the District's stakeholders following the adoption of the resolution declaring the applicable water shortage stage. Key attributes of the Crisis Communication Plan are summarized in this chapter.

Section 6.2 Notice and Publication

Within five (5) days of the adoption of the resolution declaring the applicable water shortage stage, the District shall make a public announcement of the applicable water shortage stage. Such declaration and notice shall provide the conditions under which each water shortage stage is to be initiated or terminated and the conservation response measures to be implemented in accordance with the applicable water shortage stage. As detailed in the Crisis Communication Plan, the District shall notify the customers, elected officials, and other key stakeholders regarding the water shortage condition, actions to be taken, goals customers are intended to achieve, and how these actions and goals will be implemented. In addition, the public at large will be informed of the situation and actions the District will be taking. Communications may occur through any of the communication methods identified in the Crisis Communication Plan, including but not limited to billing inserts, special mailings, e-mail, social media, roadway signage, newsletters, and education programs. Literature appropriate to the emergency or drought circumstance will be provided regarding the water shortage condition, conservation methods, and water-savings devices. The District's website, www.mnwd.com, will be the central location for messaging and customer communications.

Section 6.3 Communication Guidelines

Table 6-1 provides the recommended communication protocols to help guide customer campaigns during implementation of a water shortage stage. It is meant primarily to help inform the public and decision-makers about the types of measures the District would take under various water shortage stages and to aid in communications with customers but should not be construed as limiting other possible options. Specific circumstances will vary with each shortage and decisions about the most appropriate response should be based on the water supply and demand conditions at the time. These actions are intended as a list of probable measures for advance preparation purposes rather than a set script to be strictly followed, recognizing that as supply and demand change over time, or as a shortage evolves, the ultimate choice of options and actions to best address the shortage may also change. It is also important to recognize that flexibility in selecting the most appropriate stage may be needed.

In the event of a catastrophic supply interruption that requires water use to be quickly prioritized for or limited to essential public health and safety needs, the District will immediately deploy appropriate strategies from Water Shortage Stages 1 through 6. In addition, outreach messaging will reflect emergency conditions and the need to focus on health and public safety.

Table 6-1: Communication Guidelines

Stage	Communication Protocols	Suggested Customer Demand Reduction Actions
1	- Initiate public information campaign; produce and distribute fact-based informational materials; - Announce water supply conditions and emphasize ways to conserve immediately; - Include increased conservation messages on website and in standard outreach efforts; and - Enhance promotion of ongoing water efficiency programs targeted advertising.	- Voluntary water conservation requested of all customers; - Adhere to water waste prohibitions; - Water budget notifications; and - Promote water efficiency programs.
2	- Intensify public information campaign conveying mandatory water-use restrictions, supply conditions and ways to save water; - Provide regular supply condition updates to customers; and - Continue promotion of ongoing water efficiency programs programs/tools.	- Require customers to use water only within 125% of their total water budget or pay Conservation Penalty; - Encourage customers to stay within water budget; - Encourage regular household meter reading by customers in the Portal; - Encourage household fix a leak; and - Intensify promotion of water efficiency programs.
3	- Expand campaign and messages to raise awareness for more severe water-saving actions/behaviors by customers; - Conduct specialized outreach to reduce discretionary outdoor water use while minimizing landscape damage; and - Establish targeted and focused social media advertising strategies.	- Require customers to stay within budget or pay Conservation Penalty; and - Promote home water savings programs to help customers identify water savings opportunities.
4	Conduct issue briefings with elected officials and other key civic and business leaders;	Promote outdoor water rationing for residential customers or pay Conservation Penalty.

Stage	Communication Protocols	Suggested Customer Demand Reduction Actions
	- Scale up campaign and frequency of messages to reflect water shortage condition; and - Increase outreach efforts for high-volume customers.	
5	- Partner with other agencies to expand public information campaign, as available; - Suspend promotion of long-term water use efficiency programs/tools to focus on imminent needs; and - Emphasize work being done by MNWD to alleviate the impacts of such a severe shortage.	- Require further residential and potable irrigation water use reductions or pay Conservation Penalty; and - Discourage various uses deemed to be non-essential.
6	Update campaign and messages to reflect likely need to focus water use on health/safety needs.	- Prohibit outdoor irrigation or pay Conservation Penalty; and - Continue all measures initiated in prior stages as appropriate.

Chapter 7 Compliance and Enforcement

Section 7.1 Penalties, Charges, and Other Enforcement of Prohibitions

Measures called for in the stages of the District's WSCP will be primarily enforced through Conservation Penalties described in Chapter 5 and educational marketing programs described Chapter 6 and as enforceable by Ordinance No. 26-02. The District utilizes water budget notifications in all stages and because of the District's Advanced Metering Infrastructure Program, the District could quickly identify those customers that repeatedly exceed budget allocations and can target messages to specific customers. The primary financial penalty for excessive use is the ascending tier water rates used by the District, with increasing rates for higher levels of use. Ascending tier rates are in place during normal and water shortage conditions. The Conservation Penalty would be added to a customer's bill along with the notification of the water use and exceedance of the customer's budget. During Stage 2, any customer who uses water in excess of 125% of his or her calculated budget shall be in violation of Ordinance No. 26-02 and shall pay a Conservation Penalty for each hundred cubic feet (HCF), or portion thereof, of water used in excess of 125% of customer's water budget. During Stage 3, any customer who uses water in excess of 100% of his or her calculated budget shall be in violation of Ordinance No. 26-02 and shall pay a Conservation Penalty for each hundred cubic feet (HCF), or portion thereof, of water used in excess of a customer's water budget. During Stages 4 through 6, any customer who uses water in excess of required reductions, as described in Section 5 and Table 7-1, shall be in violation of Ordinance No. 26-02 and shall pay a Conservation Penalty for each HCF, or portion thereof, of water used in excess of such amounts. The Conservation Penalty shall be in addition to the volumetric charge the District collects for the potable water or recycled water delivered. The water demand reductions required for each of the stages and the Conservation Penalties that may be imposed are shown in **Table 7-1**. The implementation of any stage of the WSCP is dependent on Board of Directors action, contemplating the District's water supply conditions and demand expectations.

The District's appeal procedures are identified in Ordinance No. 26-02.

Table 7-1: Conservation Penalty by Stage

Stage	Conservation Penalty – Water Budget Tier Application	Conservation Penalty Formulas ¹
Residential Customers		
1	N/A	None
2	Applied beginning at Tier 4	Tier 5 – Tier 4
3	Applied beginning at Tier 3	Tier 5 – Tier 3
4	Applied beginning at excess of 60% of Tier 2	Tier 5 – Tier 2
5	Applied beginning at excess of 30% of Tier 2	Tier 5 – Tier 2
6	Applied beginning at excess of 40 gallons per person per day of Tier 1	Tier 5 – Tier 1
Irrigation Customers		
1	N/A	None
2	Applied beginning at Tier 3	Tier 4 – Tier 3
3	Applied beginning at Tier 2	Tier 4 – Tier 2
4	Applied beginning at excess of 60% of Tier 1	Tier 4 – Tier 1
5	Applied beginning at excess of 30% of Tier 1	Tier 4 – Tier 1
6	Applied for any water use	Tier 4 – Tier 1
Recycled Customers		
1	N/A	None
2	Applied beginning at Tier 3	Tier 4 – Tier 3
3	Applied beginning at Tier 2	Tier 4 – Tier 2
4	Applied beginning at excess of 90% of Tier 1	Tier 4 – Tier 1
5	Applied beginning at excess of 80% of Tier 1	Tier 4 – Tier 1
6	Applied beginning at excess of 70% of Tier 1	Tier 4 – Tier 1
Commercial Customers		
1	N/A	None
2	Applied beginning at Tier 3	Tier 4 – Tier 3
3-6	Applied beginning at Tier 2	Tier 4 – Tier 2
¹ Based on effective water rates in place at the time the penalty is incurred.		

Chapter 8 Legal Authorities

The District has the legal authority to implement and enforce its WSCP. California Constitution Article X, Section 2 and CWC Section 100 provide that water must be put to beneficial use, the waste or unreasonable use or unreasonable method of use of water shall be prevented, and the conservation of water is to be exercised with a view of the reasonable and beneficial use thereof in the interest of the people and the public welfare. Sections of CWC Chapter 3 commencing with Section 350 of Division 1, provide the authority for the governing body of a water agency to declare a water shortage and to adopt and enforce water conservation restrictions. (Wat. Code Sections 350-359, 375-378.0.) If necessary, the District shall declare a water shortage emergency in accordance with CWC Chapter 3 of Division 1. Once having declared a water shortage, the District is provided with broad powers to implement and enforce regulations and restrictions for managing a water shortage. For example: CWC Section 375(a) provides:

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

(Water Code Section 375(a).) CWC Section 375(b) grants the District authority to set prices to encourage water conservation.

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

Pursuant to these authorities, the District is adopting Ordinance No. 26-02, which prohibits waste and imposes water conservation requirements, including six stages of water shortage conditions and conservation requirements in each stage. The stages are consistent with CWC Section 10632(a)(3) and include the declaration of a water shortage emergency as appropriate in compliance with CWC Section 350.

The General Manager is authorized and directed to implement the provisions of the WSCP, as enabled by the District's Ordinance No. 26-02, an Ordinance of the Moulton Niguel Water District Adopting the Water Shortage Contingency Plan and Prescribing Water Conservation Rules and Regulations (Ordinance No. 26-02), as provided for herein. The Ordinance amends and replaces the District's Rules and Regulations regarding Water Conservation and empowers the District to implement and enforce its shortage response actions identified herein. The District shall coordinate with its service area cities that receive water supply services, for the possible proclamation of a local emergency under California Government Code, California Emergency Services Act (Article 2, Section 8558).

Chapter 9 Financial Consequences of WSCP

MNWD budgets for a baseline level of water use efficiency programs and campaigns, regardless of any water shortage level. Under the WSCP, the District's water sales would decrease as water conservation is realized, resulting in lower General Fund revenue. Subsequently, this would offset the General Fund expenses, as water will not be purchased from MWD. The revenues collected from assessed volumetric conservation penalties are to be utilized in the additional WSCP education and outreach campaigns, to enhance shortage response at each level, above and beyond baseline conditions. The cost of compliance is recovered by the penalties and actions described within the WSCP, at each shortage level. Overall, there is no net financial impact to the District for implementation of the WSCP and Chapter 3.3 of the CWC for excessive water use.

Section 9.1 Changes in Operating Budget

The District purchases treated water and untreated water from MWD via wholesale purchases through MWDOC. MNWD assumes that imported water costs would decrease by the amount of water conserved multiplied by the cost of imported water. During allocation events in a drought, MWDOC may charge drought surcharges if MNWD does not achieve target reductions for the given water shortage stage. If MWDOC imposes such drought surcharge rates, this analysis assumes that those costs will be passed through directly to MNWD customers. The cost of recycled water supply remains largely the same to MNWD, regardless of whether customers purchase the water. As such, changes in recycled water consumption were assumed to have a negligible impact on the District's operating expenses.

Section 9.2 Summary of Financial Impacts

Consistent with recommendations in the UWMP guidebook, longer term demand reductions associated with infrastructure improvements or installation of water-efficient appliances and fixtures have not been factored into the savings calculations. Any rate or conservation penalty revenue that the District collects in excess of the marginal supply cost of water is separately maintained in the District's Water Efficiency Fund and is applied towards rebates and other water efficiency programs.

As previously mentioned, the actual financial impact of each water shortage stage will depend on variables that MNWD has little or no control over. Preliminary sensitivity analysis indicates that variations in the amount of water conservation by customers may result in significant swings in net revenue, though the impact to the District's financial position would be limited.

If customers do not conserve as much as planned, there will be an increase in net revenues and vice versa. This dynamic is driven by the fact that customers will largely be paying top-tier rates for any water that they do not otherwise conserve. That top-tier water is more expensive than MNWD's marginal cost of purchased water; therefore, the net revenue would increase. If customers conserve less than forecasted, net revenue will increase, and the Water Efficiency Fund reserves will increase. In this circumstance, the District's first course of action would be to increase water use efficiency program expenditures to achieve more water use reductions.

The rate design is such that decreases in water usage above the individual budget only impact the District's Water Efficiency Fund. The marginal cost of water is used to delineate revenue that goes to the Water Efficiency Fund versus that used to pay for imported water through the District's General Fund. If customers use less water in the higher tiers, less money is needed for conservation and water reliability projects. Hence, the clear nexus in design provides a mechanism to mitigate risk from changes in water use. Reduced water usage within the individually calculated water budget increases net revenues due to the price to the customer being lower than the cost of imported water. To achieve this, the District allocated property tax revenue to provide an incentive for more efficient water use.

MNWD's conservation penalty policies have been structured to minimize the financial impact of the water shortage stages to both customers and the District, while also achieving the water conservation goals set by the District's WSCP. If actual water conservation falls short of the target reductions for a given stage, the District intends to use the increase in net revenues to increase conservation efforts such as outreach and rebate funding, or otherwise offset future rate increases. Conversely, if actual water conservation exceeds the target reductions, MNWD has established reserves that will enable the District to temporarily withstand the revenue shortfall which would only be in the Water Efficiency Fund and would not be needed with customers meeting efficiency goals. These policies will help MNWD to maintain financial stability and promote necessary water conservation during implementation of a water shortage stage. In conclusion, there is overall no net financial impact on the District for implementation of the WSCP and Chapter 3.3 of the CWC for excessive water use.

Chapter 10 Monitoring and Reporting

Section 10.1 District’s Advanced Metering Infrastructure

Water use in the District’s service area is 100 percent metered. The District upgraded its meter technology as part of its “Advanced Metering Infrastructure” program. These upgraded smart meters help the District improve operations and enable all customers and the District to monitor hourly water usage. The Advanced Metering Infrastructure system provides a concise method for monitoring the effectiveness and efficiency of the WSCP measures. The ability for the District and our customers to view daily insights and get proactive notifications can help ensure that customers have the information they need to stay within their water budget.

During a water shortage stage, a monthly production forecast and water budget are developed for each customer class. Depending on the shortage stage, actual production and demands are monitored monthly to verify that the budgeted goals are being met. The status would be reported to the General Manager. If the trend in consumption is such that demands are exceeding water budgets greater than anticipated, the General Manager and Board of Directors are notified so that corrective action (such as increased public education campaigns and customer notifications) can be taken.

Section 10.2 State Water Board Monthly Reporting

On May 9, 2016, the Governor issued Executive Order B-37-16 to make water conservation a way of life in California and directed the State Water Resources Control Board to establish permanent reporting and data collection by urban water suppliers. On April 21, 2020, the State Water Resources Control Board adopted Resolution No. 2020-0009, which requires monthly urban water conservation reporting. The Single Urban Drought & Conservation Reporting is used for monthly reporting. The monthly reporting required by the State Water Resources Control Board through the SAFER Clearinghouse will be used for reporting purposes of this WSCP, when a stage is implemented.

Chapter 11 WSCP Refinement Procedures

Section 11.1 Plan Review and Update

Reevaluation and improvement procedures are used to ensure water shortage responses are adequate and appropriate mitigation strategies are implemented as needed. The District has and will periodically evaluate the elements of the WSCP and update as necessary to ensure conformance with CWC requirements. The WSCP will be reviewed at least every five years as part of the UWMP update process, but the frequency of the re-evaluation could increase based on lessons learned, new statutory requirements, continued local supply development, and other factors as determined by the District. The District may also amend the WSCP to address factors that would have a significant effect on conservation planning.

Chapter 12 Special Water Feature Distinction

CWC Section 10632(b) requires the District to 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.

For purposes of this WSCP, a swimming pool or pool means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. “Swimming pool” includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas, and nonportable wading pools. A decorative water feature is considered artificially supplied with water and could include fountains, ponds, and waterfalls. Decorative water features are designed for visual appreciation, not for public play and interaction. As such, a decorative water feature may use or be able to use recycled or recirculated water, whereas pools and spas must use potable water for health and safety considerations.

Chapter 5, Section 5.1.4 identifies Permanent Water Conservation Requirements that includes water conservation BMPs that have been established to conserve water, prevent the waste or unreasonable use or unreasonable method of use of water, and preserve the District’s water supplies. BMP I requires re-circulating water for decorative water fountains and decorative water features. The BMP prohibits the operation of a decorative water fountain or other decorative water feature that does not use re-circulated water. BMP P encourages property owners who have a swimming pool or a spa to cover the facilities to minimize water loss due to evaporation.

Chapter 13 Plan Adoption, Submittal, and Availability

The District provided notice of the availability of the Draft UWMP (including the WSCP) and notice of the public hearing to consider adoption of both plans in accordance with CWC Sections 10621(b) and 10642. The public review draft of the WSCP was posted on the District's website, <https://www.mnwd.com/reports-publications/>. The notice of availability of the WSCP was sent to service area cities and County, as well as neighboring water agencies.

Newspaper notices of the public availability of the Draft Ordinance and 2026 WSCP and notification for the public hearing were published in the Orange County Register in May 2026, as required by the CWC. The District held a public hearing on June 11, 2026, to solicit public comments and then adopt the updated 2026 WSCP. In fulfillment of CWC Sections 10632(c) and 10645(a) and (b), the District's Final WSCP will be posted on the District's website, <https://www.mnwd.com/reports-publications/> following the adoption by the District's Board of Directors. The District shall make its WSCP available to its customers and the cities and county within which it provides water supplies no later than 30 days after adoption in conformance with CWC section 10632(c). The District will also submit a copy to DWR. If revised, the District shall submit a copy of the WSCP to DWR within 30 days of adoption.

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Appendix D

Reduced Delta Reliance Reporting



Appendix D Reduced Delta Reliance Reporting

Section 1.1 Background

The Delta Plan is a comprehensive, long-term resource management plan for Sacramento-San Joaquin Bay Delta that was developed as part of the Delta Reform Act of 2009 (Water Code Section 85000 et seq) and includes both regulatory policies and recommendations, aimed at promoting a healthy Delta ecosystem. Under the Delta Reform Act of 2009, state and local public agencies proposing a covered action (e.g., a project) in the Delta, prior to initiating the implementation of that action, must prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with applicable Delta Plan policies and submit that certification to the Delta Stewardship Council. Because Moulton Niguel Water District (MNWD or District) is a member of Municipal Water District of Orange County (MWDOC) and recipient of Metropolitan Water District of Southern California (Metropolitan or MWD) supplies, the District may receive water under a future “covered action” through MWD’s participation in the proposed Delta Conveyance Project.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action, such as the Delta Conveyance Project, should provide information in their 2015, 2020, and 2025 Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1). Delta Plan Policy WR P1 (California Code of Regulations, Title 23, Section 5003) is one of fourteen regulatory policies in the Delta Plan. WR P1 identifies UWMPs as the tool to demonstrate consistency with state policy to reduce reliance on the Delta for any supplier that is participating in, conducting a proposed covered action, or receiving Delta water from a proposed covered action. Within the supplier’s UWMP, information should be provided that can be used to demonstrate consistency with this policy.

WR P1 details what is needed for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

- (a) Water shall not be exported from, transferred through, or used in the Delta if all of the following apply:*
 - (1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
 - (2) That failure has significantly caused the need for the export, transfer, or use; and*
 - (3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

(c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:

- (A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*
- (B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and*
- (C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code Section 1011(a).*

The analysis and documentation provided below include the elements described in WR P1(c)(1) that need to be included in the District's UWMP to support a certification of consistency for a future covered action.

Section 1.2 Summary of Expected Outcomes for Reduced Reliance on the Delta

As stated in WR P1 (c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta.

The expected outcomes for the District's regional self-reliance were developed using the approach and guidance described in Appendix C of DWR's Urban Water Management Plan Guidebook 2025 – Final Draft (Guidebook Appendix C) issued in February 2026. The data used in this analysis represent the total regional efforts of MWD, MWDOC, and its member agencies, including the District, and were developed in conjunction with MWD as part of the UWMP coordination process.

The following provides a summary of the near-term (2030) and long-term (2050) expected outcomes for the District's Delta reliance and regional self-reliance. The results show that as a region, MWDOC, MWD, and its member agencies, including the District, are measurably reducing reliance on the Delta and improving regional self-reliance, both as an amount of water used and as a percentage of water used.

Section 1.2.1 Expected Outcomes for Regional Self-Reliance for the District

- Near-term (2030) – Normal water year regional self-reliance is expected to increase by 7,173 AF from the 2010 baseline; this represents an increase of about 17.9 percent of 2030 normal water year retail demands (Table 2).
- Long-term (2050) – Normal water year regional self-reliance is expected to increase by nearly 12,323 AF from the 2010 baseline, this represents an increase of about 31.4 percent of 2050 normal water year retail demands (Table 2).

Section 1.3 Demonstration of Reduced Reliance on the Delta

The methodology used to determine the District’s reduced Delta reliance and improved regional self-reliance is consistent with the approach detailed in DWR’s UWMP Guidebook Appendix C, including the use of narrative justifications for the accounting of supplies and the documentation of specific data sources. Some of the key assumptions underlying the District’s demonstration of reduced reliance include:

- All data were obtained from the current 2025 UWMP or previously adopted UWMPs and represent average or normal water year conditions.
- All analyses were conducted at the service area level, and all data reflect the total contributions of the District and MWDOC, in conjunction with information provided by MWD.
- No projects or programs that are described in the UWMPs as “Projects Under Development” were included in the accounting of supplies.

Section 1.3.1 Baseline and Expected Outcomes

In order to calculate the expected outcomes for measurable reduction in Delta reliance and improved regional self-reliance, a baseline is needed to compare against. This analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in the Guidebook Appendix C. Data for the 2010 baseline were taken from the District’s 2005 UWMP as the UWMPs generally do not provide normal water year data for the year that they are adopted (i.e., 2005 UWMP forecasts begin in 2010, 2010 UWMP forecasts begin in 2015, and so on).

Consistent with the 2010 baseline data approach, the expected outcomes for reduced Delta reliance and improved regional self-reliance for 2015 and 2020 were taken from the District’s 2010 and 2015 UWMPs, respectively. Expected outcomes for 2030-2050 are from the current 2025 UWMP. Documentation of the specific data sources and assumptions are included in the discussions below.

Section 1.3.2 Service Area Demands without Water Use Efficiency

In alignment with the Guidebook Appendix C, this analysis uses normal water year demands, rather than normal water year supplies to calculate expected outcomes in terms of the percentage of water used. Using normal water year demands serves as a proxy for the amount of supplies that would be used in a normal water year, which helps alleviate issues associated with how supply capability is presented to fulfill requirements of the UWMP Act versus how supplies might be accounted for to demonstrate consistency with WR P1.

Because WR P1 considers water use efficiency savings a source of water supply, water suppliers such as the District need to explicitly calculate, and report water use efficiency savings separate from service area demands to accurately reflect normal water year demands in the calculation of reduced reliance. As explained in the Guidebook Appendix C, water use efficiency savings must be added back to the normal year demands to represent demands without water use efficiency savings accounted for; otherwise, the effect of water use efficiency savings on regional self-reliance would be overestimated. **Table 1** shows the results of this adjustment for the District. Supporting narratives and documentation for the data shown in Table 1 are provided below.

Section 1.3.2.1 Service Area Demands with Water Use Efficiency

The service area demands shown in Table 1 represent the total retail water demands for the District's service area and include residential, commercial, potable irrigation, and recycled demands. These demand types and the modeling methodologies used to calculate them are described in Section 4 of the District's UWMP.

Section 1.3.2.2 Non-Potable Water Demands

The non-potable water demands shown in Table 1 represent demands for recycled water. Additionally, non-potable supplies have a demand hardening effect due to the inability to shift non-potable supplies to meet potable water demands. When water use efficiency or conservation measures are implemented, they fall solely on the potable water users. This is consistent with the approach for water conservation reporting used by the State Water Resources Control Board.

Section 1.3.2.3 Total Service Area Population

The District's total service area population as shown in Table 1 come from the Center for Demographic Research, as described in Section 3 of the District's UWMP.

Section 1.3.2.4 Water Use Efficiency Since Baseline

The water use efficiency numbers shown in Table 1 represent the formulation the District utilized, consistent with Appendix C of the UWMP Guidebook approach.

Service area demands, excluding non-potable demands, are divided by the service area population to get per capita water use in the service area in gallons per capita per day (GPCD) for each five-year period. The change in per capita water use from the baseline is the comparative GPCD from that five-year period compared to the 2010 baseline. Changes in per capita water use over time are then applied back to the District's service area population to calculate the estimated WUE Supply. This estimated WUE Supply is considered an additional supply that may be used to show reduced reliance on Delta water supplies.

Table 1: Calculation of WUE and Calculation of Service Area Water Demands Without WUE

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Water Demands with Water Use Efficiency Accounted For	44,914	40,600	35,444	28,320	28,012	27,231	26,750	26,186	25,623
Non-Potable Water Demands	9,800	8,500	7,639	4,896	4,946	4,996	5,046	5,096	5,146
Potable Service Area Demands with Water Use Efficiency Accounted For	35,114	32,100	27,805	23,424	23,066	22,235	21,704	21,090	20,477

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Population	167,600	174,342	172,876	168,315	167,762	167,396	166,548	164,639	162,767

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Per Capita Water Use (GPCD)	187	164	144	124	123	118	116	114	112
Change in Per Capita Water Use from Baseline (GPCD)		(23)	(43)	(63)	(64)	(68)	(71)	(73)	(75)
Estimated Water Use Efficiency Since Baseline		4,427	8,414	11,878	12,027	12,751	13,246	13,463	13,617

Total Service Area Water Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Water Demands with Water Use Efficiency Accounted For	44,914	40,600	35,444	28,320	28,012	27,231	26,750	26,186	25,623
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline		4,427	8,414	11,878	12,027	12,751	13,246	13,463	13,617
Service Area Water Demands without Water Use Efficiency Accounted For	44,914	45,027	43,858	40,198	40,039	40,072	39,996	39,649	39,240

The demand and water use efficiency data shown in Table 1 were collected from the following sources:

- Baseline 2010 values – District’s 2005 UWMP, Tables 2 and 8
- 2015 values – District’s 2010 UWMP, Tables 2-2 and 2-9
- 2020 values – District’s 2015 UWMP, Table 2-2 and DWR Tables 4-2 and 6-4, Errata
- 2025-2050 values – District’s 2025 UWMP, DWR Table 6-9

It should be noted the results of this calculation differs from what the District calculated under Section 5 pertaining to the Water Conservation Act of 2009 (SB X7-7) due to differing formulas.

Section 1.4 Supplies Contributing to Regional Self-Reliance

For a covered action to demonstrate consistency with the Delta Plan, WR P1 subsection (c)(1)(C) states that water suppliers must report the expected outcomes for measurable improvement in regional self-reliance. **Table 2** shows expected outcomes for supplies contributing to regional self-reliance both in amount and as a percentage. The numbers shown in **Table 2** represent efforts to improve regional self-reliance for the District’s entire service area. Supporting narratives and documentation for the data shown in Table 2 are provided below.

The results shown in Table 2 demonstrate the District’s service area is measurably improving its regional self-reliance. In the near-term (2030), the expected outcome for normal water year regional self-reliance increases by 7,173 AF from the 2010 baseline; this represents an increase of about 17.9 percent of 2030 normal water year retail demands. In the long-term (2050), normal water year regional self-reliance is expected to increase by more than 12,323 AF from the 2010 baseline; this represents an increase of about 31.4 percent of 2050 normal water year retail demands.

Section 1.4.1 Water Use Efficiency

The water use efficiency information shown in Table 2 is taken directly from Table 1.

Section 1.4.2 Water Recycling

The water recycling values shown in Table 2 reflect the total recycled water production in service area as described in Section 6 of the District’s UWMP.

Table 2: Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Water Use Efficiency		4,427	8,414	11,878	12,027	12,751	13,246	13,463	13,617
Water Recycling	9,800	8,500	7,639	4,896	4,946	4,996	5,046	5,096	5,146
Stormwater Capture and Use									
Advanced Water Technologies							3,360	3,360	3,360
Conjunctive Use Projects									
Local and Regional Water Supply and Storage Projects									
Other Programs and Projects the Contribute to Regional Self-Reliance									
Water Supplies Contributing to Regional Self-Reliance	9,800	12,927	16,053	16,774	16,973	17,747	21,652	21,919	22,123

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Water Demands without Water Use Efficiency Accounted For	44,914	45,027	43,858	40,198	40,039	40,072	39,996	39,649	39,240

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Water Supplies Contributing to Regional Self-Reliance	9,800	12,927	16,053	16,774	16,973	17,747	21,652	21,919	22,123
Change in Water Supplies Contributing to Regional Self-Reliance		3,127	6,253	6,974	7,173	7,947	11,852	12,119	12,323

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Percent of Water Supplies Contributing to Regional Self-Reliance	21.8%	28.7%	36.6%	41.7%	42.4%	44.3%	54.1%	55.3%	56.4%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		6.9%	14.8%	17.3%	17.9%	19.8%	29.6%	30.6%	31.4%

Section 1.5 Reliance on Water Supplies from the Delta Watershed

Metropolitan's service area as a whole, reduces reliance on the Delta through investments in non-Delta water supplies, local water supplies, and demand management measures. Quantifying the District's investments in self-reliance, locally, regionally, and throughout Southern California is infeasible for the reasons noted in Section 1.6. Due to the regional nature of these investments, the District is relying on Metropolitan's regional accounting of measurable reductions in supplies from the Delta Watershed.

The results shown in **Table 3** demonstrate that Metropolitan's service area, including MWDOC and the District, is measurably reducing its Delta reliance. In the near-term (2030), the expected outcome for normal water year reliance on supplies from the Delta watershed decreased by 466 TAF from the 2010 baseline; this represents a decrease of 6.5 percent of 2030 normal water year retail demands. In the long-term (2050), normal water year reliance on supplies from the Delta watershed decreased by 537 TAF from the 2010 baseline; this represents a decrease of just over 9 percent of 2050 normal water year retail demands.

Section 1.6 Infeasibility of Accounting Supplies from the Delta Watershed for Metropolitan's Member Agencies and their Customers

Metropolitan's service area, as a whole, reduces reliance on the Delta through investments in non-Delta water supplies, local water supplies, and regional and local demand management measures.

Metropolitan's member agencies coordinate reliance on the Delta through their membership in Metropolitan, a regional cooperative providing wholesale water service to its 26 member agencies. Accordingly, regional reliance on the Delta can only be measured regionally—not by individual Metropolitan member agencies and not by the customers of those member agencies.

Metropolitan's member agencies, and those agencies' customers, indirectly reduce reliance on the Delta through their collective efforts as a cooperative. Metropolitan's member agencies do not control the amount of Delta water they receive from Metropolitan. Metropolitan manages a statewide integrated conveyance system consisting of its participation in the State Water Project (SWP), its Colorado River Aqueduct (CRA) including Colorado River water resources, programs and water exchanges, and its regional storage portfolio. Along with the SWP, CRA, storage programs, and Metropolitan's conveyance and distribution facilities, demand management programs increase the future reliability of water resources for the region. In addition, demand management programs provide system-wide benefits by decreasing the demand for imported water, which helps to decrease the burden on the District's infrastructure and reduce system costs, and free up conveyance capacity to the benefit of all member agencies.

Table 3: MWD Reliance on Water Supplies from the Delta Watershed

Water Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
CVP/SWP Contract Supplies	1,472,000	1,029,000	984,000	1,133,000	949,000	924,000	901,000	877,000	877,000
Delta/Delta Tributary Diversions	-	-	-	-	-	-	-	-	-
Transfers and Exchanges of Supplies from the Delta Watershed	20,000	44,000	91,000	58,000	77,000	77,000	78,000	78,000	78,000
Other Water Supplies from the Delta Watershed	-	-	-	-	-	-	-	-	-
Total Water Supplies from the Delta Watershed	1,492,000	1,073,000	1,075,000	1,191,000	1,026,000	1,001,000	979,000	955,000	955,000

Service Area Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Service Area Demands without Water Use Efficiency Accounted For	5,493,000	5,499,000	5,219,000	4,925,000	4,969,000	5,102,000	5,209,000	5,302,000	5,391,000

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Water Supplies from the Delta Watershed	1,492,000	1,073,000	1,075,000	1,191,000	1,026,000	1,001,000	979,000	955,000	955,000
Change in Supplies from the Delta Watershed	NA	(419,000)	(417,000)	(301,000)	(466,000)	(491,000)	(513,000)	(537,000)	(537,000)

Percent Change in Supplies from the Delta Watershed (As a Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050
Percent of Supplies from the Delta Watershed	27.2%	19.5%	20.6%	24.2%	20.6%	19.6%	18.8%	18.0%	17.7%
Change in Percent of Supplies from the Delta Watershed	NA	-7.6%	-6.6%	-3.0%	-6.5%	-7.5%	-8.4%	-9.1%	-9.4%

Metropolitan's costs are funded almost entirely from its service area, with the exception of grants and other assistance from government programs. Most of Metropolitan's revenues are collected directly from its member agencies. Properties within Metropolitan's service area pay a property tax that currently provides approximately 25 percent of the fiscal year 2026 annual budgeted revenues. The rest of Metropolitan's costs are funded through rates and charges paid by Metropolitan's member agencies for the wholesale services it provides to them.¹ Thus, Metropolitan's member agencies fund nearly all operations Metropolitan undertakes to reduce reliance on the Delta, including Colorado River Programs, storage facilities, Local Resources Programs and Conservation Programs within Metropolitan's service area.

Because of the integrated nature of Metropolitan's systems and operations, and the collective nature of Metropolitan's regional efforts, it is infeasible to quantify each of Metropolitan member agencies' individual reliance on the Delta. It is infeasible to attempt to segregate an entity and a system that were designed to work as an integrated regional cooperative.

In addition to the member agencies funding Metropolitan's regional efforts, they also invest in their own local programs to reduce their reliance on any imported water. Moreover, the customers of those member agencies may also invest in their own local programs to reduce water demand. However, to the extent those efforts result in reduction of demands on Metropolitan, that reduction does not equate to a like reduction of reliance on the Delta. Demands on Metropolitan are not commensurate with demands on the Delta because most of Metropolitan member agencies receive blended resources from Metropolitan as determined by Metropolitan—not the individual member agency—and for most member agencies, the blend varies from month-to-month and year-to-year due to hydrology, operational constraints, use of storage and other factors.

Section 1.6.1 Colorado River Programs

As a regional cooperative of member agencies, Metropolitan invests in programs to ensure the continued reliability and sustainability of Colorado River supplies. Metropolitan was established to obtain an allotment of Colorado River water, and its first mission was to construct and operate the CRA. The CRA consists of five pumping plants, 450 miles of high voltage power lines, one electric substation, four regulating reservoirs, and 242 miles of aqueducts, siphons, canals, conduits, and pipelines terminating at Lake Mathews in Riverside County. Metropolitan owns, operates, and manages the CRA. Metropolitan is responsible for operating, maintaining, rehabilitating, and repairing the CRA, and is responsible for obtaining and scheduling energy resources adequate to power pumps at the CRA's five pumping stations.

¹ A standby charge is collected from properties within the service areas of 21 of Metropolitan's 26 member agencies, ranging from \$5 to \$14.20 per acre annually, or per parcel if smaller than an acre. Standby charges go towards those member agencies' obligations to Metropolitan for the Readiness-to-Serve Charge.

Colorado River supplies include Metropolitan's basic Colorado River apportionment, along with supplies that result from existing and committed programs, including supplies from the Imperial Irrigation District (IID)-Metropolitan Conservation Program, the implementation of the Quantification Settlement Agreement (QSA) and related agreements, and the exchange agreement with San Diego County Water Authority (SDCWA). The QSA established the baseline water use for each of the agreement parties and facilitates the transfer of water from agricultural agencies to urban uses. Since the QSA, additional programs have been implemented to increase Metropolitan's CRA supplies. These include the PVID Land Management, Crop Rotation, and Water Supply Program, as well as the Lower Colorado River Water Supply Project. The 2007 Interim Guidelines provided for the coordinated operation of Lake Powell and Lake Mead, as well as the Intentionally Created Surplus (ICS) program that allows Metropolitan to store water in Lake Mead.

Section 1.6.2 Storage Investments/Facilities

Surface and groundwater storage are critical elements of Southern California's water resources strategy and help Metropolitan reduce its reliance on the Delta. Because California experiences dramatic swings in weather and hydrology, storage is important to regulate those swings and mitigate possible supply shortages. Surface and groundwater storage provide a means of storing water during normal and wet years for later use during dry years, when imported supplies are limited. The Metropolitan system, for purposes of meeting demands during times of shortage, regulating system flows, and ensuring system reliability in the event of a system outage, provides over 1,000,000 acre-feet of system storage capacity. Diamond Valley Lake provides 810,000 acre-feet of that storage capacity, effectively doubling Southern California's previous surface water storage capacity. Other existing imported water storage available to the region consists of Metropolitan's raw water reservoirs, a share of the SWP's raw water reservoirs in and near the service area, and the portion of the groundwater basins used for conjunctive-use storage.

Since the early twentieth century, DWR and Metropolitan have constructed surface water reservoirs to meet emergency, drought/seasonal, and regulatory water needs for Southern California. These reservoirs include Pyramid Lake, Castaic Lake, Elderberry Forebay, Silverwood Lake, Lake Perris, Lake Skinner, Lake Mathews, Live Oak Reservoir, Garvey Reservoir, Palos Verdes Reservoir, Orange County Reservoir, and Metropolitan's Diamond Valley Lake (DVL). Some reservoirs such as Live Oak Reservoir, Garvey Reservoir, Palos Verdes Reservoir, and Orange County Reservoir, which have a total combined capacity of about 3,500 AF, are used solely for regulating purposes. The total gross storage capacity for the larger remaining reservoirs is 1,757,600 AF. However, not all of the gross storage capacity is available to Metropolitan; dead storage and storage allocated to others reduce the amount of storage that is available to Metropolitan to 1,665,200 AF.

Conjunctive use of the aquifers offers another important source of dry year supplies. Unused storage in Southern California groundwater basins can be used to optimize imported water supplies, and the development of groundwater storage projects allows effective management and regulation of the region's major imported supplies from the Colorado River and SWP. Over the years, Metropolitan has implemented conjunctive use through various programs in the service area; **Table 4** lists the groundwater conjunctive use programs that have been developed in the region.

Table 4: MWD Conjunctive Use Programs

Project and Project Proponents*	Storage Capacity (TAF)	Dry-Year Yield (TAF/Year)	Storage Account Balance as of 1/1/2025 (TAF)
Los Angeles County			
Upper Claremont Heights Groundwater Storage Program Three Valleys MWD	3.0	1.0	1.2
San Bernardino County			
Chino Basin Groundwater Storage Program IEUA, TVMWD, Chino Basin Watermaster	100.0	33.0	63.8
Riverside County			
Elsinore Groundwater Storage Program Western MWD, Elsinore Valley MWD	12.0	4.0	11.9
Total	115.0	35.0	76.9

* Metropolitan's active Conjunctive Use Programs as of July 1, 2025.

Section 1.6.3 Metropolitan Demand Management Programs

Demand management costs are Metropolitan's expenditures for funding local water resource development programs and water conservation programs. These Demand Management Programs incentivize the development of local water supplies and the conservation of water to reduce the need to import water to deliver to Metropolitan's member agencies. These programs are implemented below the delivery points between Metropolitan's and its member agencies' distribution systems and, as such, do not add any water to Metropolitan's supplies. Rather, the effect of these downstream programs is to produce a local supply of water for the local agencies and to reduce demands by member agencies for water imported through Metropolitan's system. The following discussions outline how Metropolitan funds local resources and conservation programs for the benefit of all of its member agencies and the entire Metropolitan service area. Notably, the history of demand management by Metropolitan's member agencies and the local agencies that purchase water from Metropolitan's members has

spanned more than four decades. The significant history of the programs is another reason it would be difficult to attempt to assign a portion of such funding to any one individual member agency.

Section 1.6.3.1 Local Resources Programs

In 1982, Metropolitan began providing financial incentives to its member agencies to develop new local supplies to assist in meeting the region's water needs. Because of Metropolitan's regional distribution system, these programs benefit all member agencies regardless of project location because they help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on Metropolitan's infrastructure, reduce system costs and free up conveyance capacity to the benefit of all the agencies that rely on water from Metropolitan.

For example, the Groundwater Replenishment System (GWRS) operated by the Orange County Water District is the world's largest water purification system for indirect potable reuse. It was funded, in part, by Metropolitan's member agencies through the Local Resources Program. Annually, the GWRS produces approximately 103,000 acre-feet of reliable, locally controlled, drought-proof supply of high-quality water to recharge the Orange County Groundwater Basin and protect it from seawater intrusion. The GWRS is a premier example of a regional project that significantly reduced the need to utilize imported water for groundwater replenishment in Metropolitan's service area, increasing regional and local supply reliability and reducing the region's reliance on imported supplies, including supplies from the State Water Project.

Metropolitan's local resource programs have evolved through the years to better assist Metropolitan's member agencies in increasing local supply production. The following is a description and history of the local supply incentive programs.

Local Projects Program - In 1982, Metropolitan initiated the Local Projects Program (LPP), which provided funding to member agencies to facilitate the development of recycled water projects. Under this approach, Metropolitan contributed a negotiated up-front funding amount to help finance project capital costs. Participating member agencies were obligated to reimburse Metropolitan over time. In 1986, the LPP was revised, changing the up-front funding approach to an incentive-based approach. Metropolitan contributed an amount equal to the avoided State Water Project pumping costs for each acre-foot of recycled water delivered to end-use consumers. This funding incentive was based on the premise that local projects resulted in the reduction of water imported from the Delta and the associated pumping cost. The incentive amount varied from year to year depending on the actual variable power cost paid for State Water Project imports. In 1990, Metropolitan's Board increased the LPP contribution to a fixed rate of \$154 per acre-foot, which was calculated based on Metropolitan's avoided capital and operational costs to convey, treat, and distribute water, and included considerations of reliability and service area demands.

Groundwater Recovery Program - The drought of the early 1990s sparked the need to develop additional local water resources, aside from recycled water, to meet regional demand and increase regional water supply reliability. In 1991, Metropolitan conducted the Brackish Groundwater Reclamation Study which determined that large amounts of degraded groundwater in the region were

not being utilized. Subsequently, the Groundwater Recovery Program (GRP) was established to assist the recovery of otherwise unusable groundwater degraded by minerals and other contaminants, provide access to the storage assets of the degraded groundwater, and maintain the quality of groundwater resources by reducing the spread of degraded plumes.

Local Resources Program - In 1995, Metropolitan's Board adopted the Local Resources Program (LRP), which combined the LPP and GRP into one program. The Board allowed for existing LPP agreements with a fixed incentive rate to convert to the sliding scale up to \$250 per acre-foot, similar to GRP incentive terms. Those agreements that were converted to LRP are known as "LRP Conversions."

Competitive Local Projects Program - In 1998, the Competitive Local Resources Program (Competitive Program) was established. The Competitive Program encouraged the development of recycled water and recovered groundwater through a process that emphasized cost-efficiency to Metropolitan, timing new production according to regional need while minimizing program administration cost. Under the Competitive Program, agencies requested an incentive rate up to \$250 per acre-foot of production over 25 years under a Request for Proposals (RFP) for the development of up to 53,000 acre-feet per year of new water recycling and groundwater recovery projects. In 2003, a second RFP was issued for the development of an additional 65,000 acre-feet of new recycled water and recovered groundwater projects through the LRP.

Seawater Desalination Program - Metropolitan established the Seawater Desalination Program (SDP) in 2001 to provide financial incentives to member agencies for the development of seawater desalination projects. In 2014, seawater desalination projects became eligible for funding under the LRP, and the SDP was ended.

2007 Local Resources Program - In 2006, a task force comprised of member agency representatives was formed to identify and recommend program improvements to the LRP. As a result of the task force process, the 2007 LRP was established with a goal of 174,000 acre-feet per year of additional local water resource development. The new program allowed for an open application process and eliminated the previous competitive process. This program offered sliding scale incentives of up to \$250 per acre-foot, calculated annually based on a member agency's actual local resource project costs exceeding Metropolitan's prevailing water rate.

2014 Local Resources Program - A series of workgroup meetings with member agencies was held to identify the reasons why there was a lack of new LRP applications coming into the program. The main constraint identified by the member agencies was that the \$250 per acre-foot was not providing enough of an incentive for developing new projects due to higher construction costs to meet water quality requirements and to develop the infrastructure to reach end-use consumers located further from treatment plants. As a result, in 2014, the Board authorized an increase in the maximum incentive amount, provided alternative payment structures, included onsite retrofit costs and reimbursable services as part of the LRP, and added eligibility for seawater desalination projects. The current LRP incentive payment options are structured as follows:

- Option 1 – Sliding scale incentive up to \$340/AF for a 25-year agreement term
- Option 2 – Sliding scale incentive up to \$475/AF for a 15-year agreement term
- Option 3 – Fixed incentive up to \$305/AF for a 25-year agreement term

On-site Retrofit Programs - In 2014, Metropolitan’s Board also approved the On-site Retrofit Pilot Program which provided financial incentives to public or private entities toward the cost of small-scale improvements to their existing irrigation and industrial systems to allow connection to existing recycled water pipelines. The On-site Retrofit Pilot Program helped reduce recycled water retrofit costs to the end-use consumer which is a key constraint that limited recycled water LRP projects from reaching full production capacity. The program incentive was equal to the actual eligible costs of the on-site retrofit, or \$975 per acre-foot of up-front cost, which equates to \$195 per acre-foot for an estimated five years of water savings (\$195/AF x 5 years) multiplied by the average annual water use in previous three years, whichever is less. The Pilot Program lasted two years and was successful in meeting its goal of accelerating the use of recycled water.

In 2016, Metropolitan’s Board authorized the On-site Retrofit Program (ORP), with an additional budget of \$10 million. This program encompassed lessons learned from the Pilot Program and feedback from member agencies to make the program more streamlined and improve its efficiency. As of fiscal year 2019/20, the ORP has successfully converted 440 sites, increasing the use of recycled water by 12,691 acre-feet per year.

Stormwater Pilot Programs - In 2019, Metropolitan’s Board authorized both the Stormwater for Direct Use Pilot Program and a Stormwater for Recharge Pilot Program to study the feasibility of reusing stormwater to help meet regional demands in Southern California. These pilot programs are intended to encourage the development, monitoring, and study of new and existing stormwater projects by providing financial incentives for their construction/retrofit and monitoring/reporting costs. These pilot programs will help evaluate the potential benefits delivered by stormwater capture projects and provide a basis for potential future funding approaches. Metropolitan’s Board authorized a total of \$12.5 million for the stormwater pilot programs (\$5 million for the District Use Pilot and \$7.5 million for the Recharge Pilot).

Current Status and Results of Metropolitan’s Local Resource Programs - Today, nearly one-half of the total recycled water and groundwater recovery production in the region has been developed with an incentive from one or more of Metropolitan’s local resource programs. During fiscal year 2020, Metropolitan provided about \$13 million for production of 71,000 acre-feet of recycled water for non-potable and indirect potable uses. Metropolitan provided about \$4 million to support projects that produced about 50,000 acre-feet of recovered groundwater for municipal use. Since 1982, Metropolitan has invested \$680 million to fund 85 recycled water projects and 27 groundwater recovery projects that have produced a cumulative total of about 4 million acre-feet.

Conservation Programs - Metropolitan’s regional conservation programs and approaches have a long history. Decades ago, Metropolitan recognized that demand management at the consumer level would be an important part of balancing regional supplies and demands. Water conservation efforts were seen

as a way to reduce the need for imported supplies and offset the need to transport or store additional water into or within the Metropolitan service area. The actual conservation of water takes place at the retail consumer level. Regional conservation approaches have proven to be effective at reaching retail consumers throughout Metropolitan's service area and successfully implementing water saving devices, programs, and practices. Through the pooling of funding by Metropolitan's member agencies, Metropolitan is able to engage in regional campaigns with wide-reaching impact. Regional investments in demand management programs, of which conservation is a key part along with local supply programs, benefit all member agencies regardless of project location. These programs help to increase regional water supply reliability, reduce demands for imported water supplies, decrease the burden on Metropolitan's infrastructure, reduce system costs, and free up conveyance capacity to the benefit of all member agencies.

Incentive-Based Conservation Programs

Conservation Credits Program - In 1988, Metropolitan's Board approved the Water Conservation Credits Program (Credits Program). The Credits Program is similar in concept to the Local Projects Program (LPP). The purpose of the Credits Program is to encourage local water agencies to implement effective water conservation projects through the use of financial incentives. The Credits Program provides financial assistance for water conservation projects that reduce demands on Metropolitan's imported water supplies and require Metropolitan's assistance to be financially feasible.

Initially, the Credits Program provided 50 percent of a member agency's program cost, up to a maximum of \$75 per acre-foot of estimated water savings. The \$75 Base Conservation Rate was established based on Metropolitan's avoided cost of pumping SWP supplies. The Base Conservation Rate has been revisited by Metropolitan's Board and revised twice since 1988, from \$75 to \$154 per acre-foot in 1990 and from \$154 to \$195 per acre-foot in 2005. In fiscal year 2020 Metropolitan processed more than 30,400 rebate applications totaling \$18.9 million.

Member Agency Administered Program - Some member agencies also have unique programs within their service areas that provide local rebates that may differ from Metropolitan's regional program. Metropolitan continues to support these local efforts through a member agency administered funding program that adheres to the same funding guidelines as the Credits Program. The Member Agency Administered Program allows member agencies to receive funding for local conservation efforts that supplement, but do not duplicate, the rebates offered through Metropolitan's regional rebate program.

Water Savings Incentive Program - There are numerous commercial entities and industries within Metropolitan's service area that pursue unique savings opportunities that do not fall within the general rebate programs that Metropolitan provides. In 2012, Metropolitan designed the Water Savings Incentive Program (WSIP) to target these unique commercial and industrial projects. In addition to rebates for devices, under this program, Metropolitan provides financial incentives to businesses and industries that created their own custom water efficiency projects. Qualifying custom projects can receive funding for permanent water efficiency changes that result in reduced potable demand.

Non-Incentive Conservation Programs - In addition to its incentive-based conservation programs, Metropolitan also undertakes additional efforts throughout its service area that help achieve water savings without the use of rebates. Metropolitan's non-incentive conservation efforts include:

- residential and professional water efficient landscape training classes
- water audits for large landscapes
- research, development and studies of new water saving technologies
- advertising and outreach campaigns
- community outreach and education programs
- advocacy for legislation, codes, and standards that lead to increased water savings

Current Status and Results of Metropolitan's Conservation Programs - Since 1990, Metropolitan has invested \$954 million in conservation rebates that have resulted in a cumulative savings of 4.32 million acre-feet of water. These investments include over 200 million square feet of lawn turf removed from both commercial and residential properties. During fiscal year 2025, 208 thousand acre-feet of water is estimated to have been conserved. This annual total includes Metropolitan's Conservation Credits Program; code-based conservation achieved through Metropolitan-sponsored legislation; building plumbing codes and ordinances; reduced consumption resulting from changes in water pricing; and pre-1990 device retrofits.

Section 1.6.4 Infeasibility of Accounting Regional Investments in Reduced Reliance Below the Regional Level

The accounting of regional investments that contribute to reduced reliance on supplies from the Delta watershed is straightforward to calculate and report at the regional aggregate level. However, any similar accounting is infeasible for the individual member agencies or their customers. As described above, the region (through Metropolitan) makes significant investments in projects, programs and other resources that reduce reliance on the Delta. In fact, all of Metropolitan's investments in Colorado River supplies, groundwater and surface storage, local resources development and demand management measures that reduce reliance on the Delta are collectively funded by revenues generated from the member agencies through rates and charges.

Metropolitan's revenues cannot be matched to the demands or supply production history of an individual agency, or consistently across the agencies within the service area. Each project or program funded by the region has a different online date, useful life, incentive rate and structure, and production schedule. It is infeasible to account for all these things over the life of each project or program and provide a nexus to each member agency's contributions to Metropolitan's revenue stream over time. Accounting at the regional level allows for the incorporation of the local supplies and water use efficiency programs done by member agencies and their customers through both the regional programs and through their own specific local programs. As shown above, despite the infeasibility of accounting reduced Delta reliance below the regional level, Metropolitan's member agencies and their customers have together made substantial contributions to the region's reduced reliance.

References

- Metropolitan Water District of Southern California (MWD), 2017. Overview of Regional Programs for Local Resource Development, December 2017. Available: <http://www.mwdh2o.com/WhoWeAre/Board/Board-Meeting/Board%20Archives/2017/12-Dec/Reports/064863458.pdf>. Date accessed: April 19, 2021.
- MWD, 2021. Achievements in Conservation, Recycling and Groundwater Recharge, February 2021. Available: http://www.mwdh2o.com/PDF_About_Your_Water/Annual_Achievement_Report.pdf. Date accessed: April 19, 2021.
- MWD, 2016. Overview of Metropolitan's Efforts to Encourage Conservation, October 2016. Available: <http://www.mwdh2o.com/WhoWeAre/Board/Board-Meeting/Board%20Archives/2016/12-Dec/Reports/064845868.pdf>. Date accessed: April 19, 2021.
- MWD, 2012. Board of Directors Water Planning and Stewardship Committee Meeting, May 8, 2012. Available: <http://www.mwdh2o.com/WhoWeAre/Board/Board-Meeting/Board%20Archives/2012/05%20-%20May/Letters/064774100.pdf>. Date accessed: April 19, 2021.
- MWD, 2020. Board of Directors Finance and Insurance Committee Meeting, October 13, 2020. Available: <http://www.mwdh2o.com/WhoWeAre/Board/Board-Meeting/Board%20Archives/2020/10%20-%20Oct/Letters/10132020%20BOD%209-3%20B-L.pdf>. Date accessed: April 19, 2021.
- MWD, 2001. Board of Directors Board Meeting, October 16, 2001. Available: <http://www.mwdh2o.com/WhoWeAre/Board/Board-Meeting/Board%20Archives/2001/10-October/Letters/003909849.pdf>. Date accessed: April 19, 2021.
- MWD, 2025. Draft Urban Water Management Plan (UWMP), Accessed April 7, 2025: <https://www.mwdh2o.com/how-we-plan/>

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Appendix E

10-year Development Projections



PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

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Content Summary

The District’s new development projects are comprised of approximately 3,300 new dwelling units, approximately 600,000 square feet change in commercial land use, as well as an overall increase of roughly 600 acre-feet of water demand, **Table E-1**.

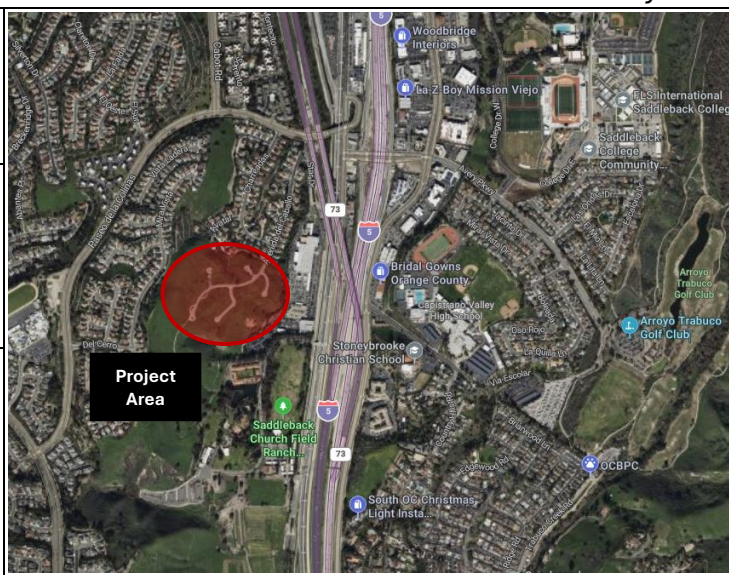
Table E- 1. Summary of MNWD New Development Projects (2026-2036)

MNWD Service Area City	Dwelling Units	Change in Commercial (sq. ft.)	Increase in Demand (AF)
ALISO VIEJO	1,200	160,000	200
LAGUNA HILLS	200	0	40
LAGUNA NIGUEL	1,000	220,000	200
MISSION VIEJO	900	240,000	150

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

1) PROJECT NAME: Tract 17433- SunPointe	
PROJECT LOCATION: Southern terminus of Avenida Del Caballo in the City of Laguna Niguel (South of Paseo De Colinas, east of Cabot Rd. and west of Star Dr.)	
PROJECT SPECIFICS: Dwelling Units: 53-71 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 26.4 AF/year Development FY: 27-28	
ADDITIONAL NOTES: Proposed development necessitates converting existing underground water pump station to an aboveground facility.	

2) PROJECT NAME: Aliso Creek Road 26501, Aliso Viejo, Portion of Commons Expansion	
PROJECT LOCATION: The site comprises parcel APN 629-101-30, located at the northwest corner of Enterprise and Town Center.	
PROJECT SPECIFICS: Dwelling Units: 360 Change in Commercial: 17,273 sq. ft. Est. Increase in Demand: 67.2 AF/year Development FY: 28-36	
ADDITIONAL NOTES: Existing surface parking, landscaping, and improvements to be removed and replaced with a mixed-use development consisting of ground floor commercial use within a six-story building, and associated parking and improvements.	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

3) PROJECT NAME: Meritage Homes 400 Freedom Lane	
PROJECT LOCATION: Located south of Freedom Lane, east of Liberty, and west of Aliso Creek Rd in City of Aliso Viejo.	
PROJECT SPECIFICS: Dwelling Units: 134 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 24.8 AF/year Development FY: 27-28	
ADDITIONAL NOTES:	

4) PROJECT NAME: Lennar Townhomes 26970 Aliso Viejo Parkway	
PROJECT LOCATION: Located at the corner of Pacific Park and Aliso Viejo. North of Pacific Park Dr, east of Aliso Viejo Parkway, and west of City Lights Dr. in City of Aliso Viejo.	
PROJECT SPECIFICS: Dwelling Units: 207 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 25.4 AF/year Development FY: 28-36	
ADDITIONAL NOTES:	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

5) PROJECT NAME: Meritage Homes 95 Argonaut	
PROJECT LOCATION: The site comprises Assessor's Parcel Number 623-091-01, bound by Glenwood Dr. to the north and Argonaut to the southwest in the City of Aliso Viejo.	
PROJECT SPECIFICS: Dwelling Units: 61 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 7.9 AF/year Development FY: 26-27	
ADDITIONAL NOTES:	

6) PROJECT NAME: Shea Townhomes 27231 Aliso Creek Road	
PROJECT LOCATION: Located in Pacific Park Plaza, west of Aliso Creek Rd, east of Aliso Viejo Parkway, and south of Pacific Park Dr. in the City of Aliso Viejo.	
PROJECT SPECIFICS: Dwelling Units: 137 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 16.7 AF/year Development FY: 27-28	
ADDITIONAL NOTES:	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

7) PROJECT NAME: MFR 28452 Marguerite Parkway	
PROJECT LOCATION: Located north of Avery Parkway, west of Marguerite Parkway, and east of College Dr. in City of Mission Viejo.	
PROJECT SPECIFICS: Dwelling Units: 416 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 74.6 AF/year Development FY: 28-36	
ADDITIONAL NOTES:	

8) PROJECT NAME: Laguna Niguel Town Center Project	
PROJECT LOCATION: The site comprises Assessor's Parcel Number 656-242-18, located at the southwest corner of Pacific Island Drive and Alicia Parkway in City of Laguna Niguel.	
PROJECT SPECIFICS: Dwelling Units: 275 Change in Commercial: 206,500 sq. ft. Est. Increase in Demand: 60.1 AF/year Development FY: 28-36	
ADDITIONAL NOTES: A Water Supply Assessment (WSA) was prepared for this project by Dudek in 2019, and approved by the MNWD Board December 18, 2019.	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

9) PROJECT NAME: Ohill Ridge Tract 93-129	
PROJECT LOCATION: Lot 1, LLA 87-88 in the City of Laguna Niguel	
PROJECT SPECIFICS: Dwelling Units: 4 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 1.5 AF/year Development FY: 28-36	
ADDITIONAL NOTES: Subdivision of 50 acres into 4 single-family residential estate lots.	

10) PROJECT NAME: Paseo De Colinas and Golden Lantern	
PROJECT LOCATION: 29001 Paseo De Colinas in the City of Laguna Niguel	
PROJECT SPECIFICS: Dwelling Units: 38 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 7 AF/year Development FY: 28-36	
ADDITIONAL NOTES:	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

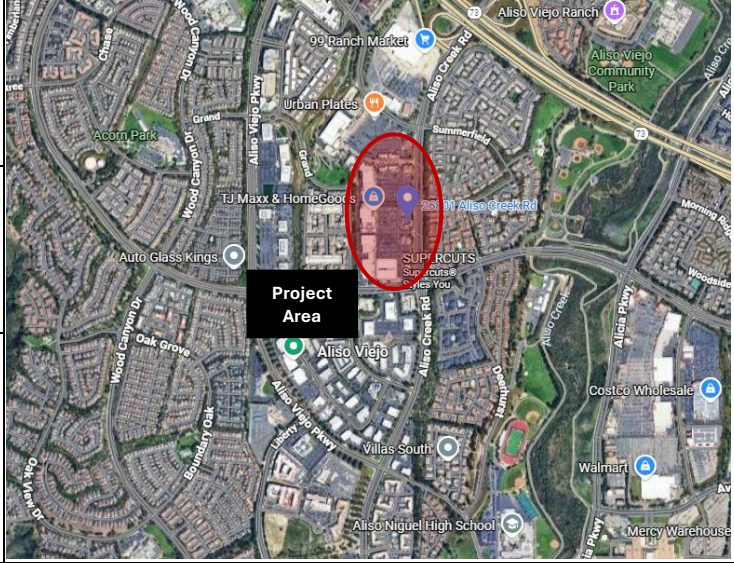
11) PROJECT NAME: Forbes Road 27601 Three Flags Center	
PROJECT LOCATION: 27601 Forbes Road, Laguna Niguel, CA 92677	
PROJECT SPECIFICS: Dwelling Units: 360 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 62.6 AF/year Development FY: 28-36	
ADDITIONAL NOTES: Lot 4 of Tract No. 5973	

12) PROJECT NAME: City of Mission Viejo Core Vision Plan	
PROJECT LOCATION: 25282 Marguerite Parkway, Mission Viejo, CA 92692	
PROJECT SPECIFICS: Dwelling Units: 0 Change in Commercial: 40,000 sq. ft. Est. Increase in Demand: 1.9 AF/year Development FY: 28-36	
ADDITIONAL NOTES: Redevelopment of the former Steinmart site.	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

13) PROJECT NAME: Aliso Creek Road 26541, Aliso Viejo, Aliso Viejo Town Center	
PROJECT LOCATION: 26541 Aliso Creek Rd, Aliso Viejo, CA 92656 at Intersection of Aliso Creek and Enterprise	
PROJECT SPECIFICS: Dwelling Units: 265 Change in Commercial: 143,572 sq. ft. Est. Increase in Demand: 58.2 AF/year Development FY: 28-36	
ADDITIONAL NOTES:	

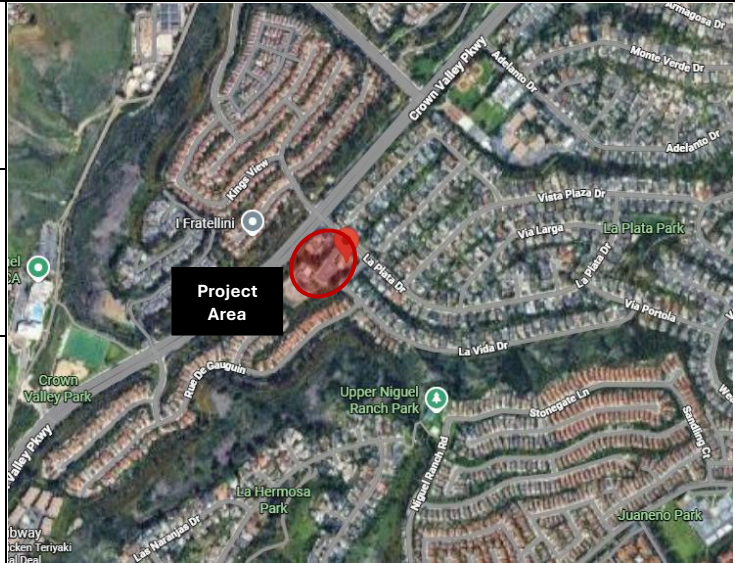
14) PROJECT NAME: NWC La Paz & Marguerite	
PROJECT LOCATION: North of La Paz and west of Marguerite Parkway in the City of Mission Viejo	
PROJECT SPECIFICS: Dwelling Units: 89 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 8.7 AF/year Development FY: 28-36	
ADDITIONAL NOTES:	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

15) PROJECT NAME: 25260 La Paz Rd, Laguna Hills, Senior Apartment	
PROJECT LOCATION: 25260 La Paz Rd, Laguna Hills, CA 92653	
PROJECT SPECIFICS: Dwelling Units: 180 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 29.8 AF/year Development FY: 28-36	
ADDITIONAL NOTES: La Paz Village Senior Housing	

16) PROJECT NAME: 24600 La Plata Laguna Niguel, Senior Housing	
PROJECT LOCATION: 24600 La Plata Dr, Laguna Niguel, CA 92677	
PROJECT SPECIFICS: Dwelling Units: 250 Change in Commercial: 10,000 sq. ft. Est. Increase in Demand: 45.7 AF/year Development FY: 28-36	
ADDITIONAL NOTES: New Senior Housing	

PRIVATE DEVELOPMENT PROJECTS (#1-18)

Fiscal Years 2027 through 2036

As of January 2026

17) PROJECT NAME: Mission Hospital Tower 3	
PROJECT LOCATION: 26862 Crown Valley Pkwy, Mission Viejo, CA 92691	
PROJECT SPECIFICS: Dwelling Units: 0 Change in Commercial: 200,000 sq. ft. Est. Increase in Demand: 24 AF/year Development FY: 26-27	
ADDITIONAL NOTES:	

18) PROJECT NAME: The Shops at Mission Viejo Mall / Macy Apartments	
PROJECT LOCATION: 300 The Shops at Mission Viejo, Mission Viejo, CA 92691	
PROJECT SPECIFICS: Dwelling Units: 453 Change in Commercial: 0 sq. ft. Est. Increase in Demand: 71.6 AF/year Development FY: 28-36	
ADDITIONAL NOTES: Proposed project for 453-469 dwelling units requires upsizing 3 wastewater pipeline reaches.	

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Appendix F

Public Notices



April 2, 2026

Ann Eifert
Acting City Manager
12 Journey, Suite 100
Aliso Viejo, CA, 92656

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Ann Eifert:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

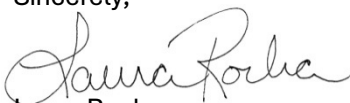
The 2025 UWMP and WSCP are developed in coordination with regional water agencies including the Metropolitan Water District of Southern California and the Municipal Water District of Orange County. The District encourages agencies, the public, and other interested parties to participate in the development of these planning documents. This letter serves as the District's notice that it is preparing and updating its 2025 UWMP and WSCP, and as part of the District's efforts to encourage public involvement in the UWMP and WSCP, in accordance with Water Code Section 10642.

A copy of the District's draft 2025 UWMP and WSCP will be available for review on the District's website (<https://www.mnwd.com/aboutmnwd/reports-publications/>) by April 9, 2026.

- The District will hold a public hearing on the 2025 WSCP on June 11, 2026, at 6:00 p.m.
- The District will also hold a public hearing on the 2025 UWMP adoption on June 11, 2026.

All interested parties are invited to attend the public hearing and comment on the District's draft 2025 UWMP and WSCP. Please direct any comments or questions regarding the MNWD 2025 UWMP or WSCP to Marina Lindsay, Senior Water Resources Analyst at mlindsay@mnwd.com, no later than May 27, 2026. The District will provide the final UWMP and WSCP on the website within 30 days of adoption by the Board of Directors. Thank you for your cooperation and involvement with these updates.

Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Kelly Reenders
City Manager
33282 Golden Lantern
Dana Point, CA, 92629

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Kelly Reenders:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Dennis Cafferty
General Manager
24251 Los Aliso Blvd.
Lake Forest, CA, 92630

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Kelly Dennis Cafferty:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Keith Van Der Maaten
General Manager, Laguna Beach County Water District
306 3rd Street
Laguna Beach, CA, 92651

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Keith Van Der Maaten:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Laura Rocha
Water Resources Manager

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April 2, 2026

Bob Wingenroth
City Manager
24035 El Toro Road
Laguna Hills, CA, 92653

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Bob Wingenroth:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

The 2025 UWMP and WSCP are developed in coordination with regional water agencies including the Metropolitan Water District of Southern California and the Municipal Water District of Orange County. The District encourages agencies, the public, and other interested parties to participate in the development of these planning documents. This letter serves as the District's notice that it is preparing and updating its 2025 UWMP and WSCP, and as part of the District's efforts to encourage public involvement in the UWMP and WSCP, in accordance with Water Code Section 10642.

A copy of the District's draft 2025 UWMP and WSCP will be available for review on the District's website (<https://www.mnwd.com/aboutmnwd/reports-publications/>) by April 9, 2026.

- The District will hold a public hearing on the 2025 WSCP on June 11, 2026, at 6:00 p.m.
- The District will also hold a public hearing on the 2025 UWMP adoption on June 11, 2026.

All interested parties are invited to attend the public hearing and comment on the District's draft 2025 UWMP and WSCP. Please direct any comments or questions regarding the MNWD 2025 UWMP or WSCP to Marina Lindsay, Senior Water Resources Analyst at mlindsay@mnwd.com, no later than May 27, 2026. The District will provide the final UWMP and WSCP on the website within 30 days of adoption by the Board of Directors. Thank you for your cooperation and involvement with these updates.

Sincerely,



Laura Rocha
Water Resources Manager

BOARD OF
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April 2, 2026

Tamara Letourneau
City Manager
30111 Crown Valley Parkway
Laguna Niguel, CA, 92677

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Tamara Letourneau:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

The 2025 UWMP and WSCP are developed in coordination with regional water agencies including the Metropolitan Water District of Southern California and the Municipal Water District of Orange County. The District encourages agencies, the public, and other interested parties to participate in the development of these planning documents. This letter serves as the District's notice that it is preparing and updating its 2025 UWMP and WSCP, and as part of the District's efforts to encourage public involvement in the UWMP and WSCP, in accordance with Water Code Section 10642.

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Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Elaine Lister
City Manager
200 Civic Center
Mission Viejo, CA, 92691

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Elaine Lister:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

The 2025 UWMP and WSCP are developed in coordination with regional water agencies including the Metropolitan Water District of Southern California and the Municipal Water District of Orange County. The District encourages agencies, the public, and other interested parties to participate in the development of these planning documents. This letter serves as the District's notice that it is preparing and updating its 2025 UWMP and WSCP, and as part of the District's efforts to encourage public involvement in the UWMP and WSCP, in accordance with Water Code Section 10642.

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- The District will also hold a public hearing on the 2025 UWMP adoption on June 11, 2026.

All interested parties are invited to attend the public hearing and comment on the District's draft 2025 UWMP and WSCP. Please direct any comments or questions regarding the MNWD 2025 UWMP or WSCP to Marina Lindsay, Senior Water Resources Analyst at mlindsay@mnwd.com, no later than May 27, 2026. The District will provide the final UWMP and WSCP on the website within 30 days of adoption by the Board of Directors. Thank you for your cooperation and involvement with these updates.

Sincerely,



Laura Rocha

Water Resources Manager

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April 2, 2026

Harvey De La Torre
General Manager
18700 Ward Street
Fountain Valley, CA, 92708

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Harvey De La Torre:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Hugh Nguyen
Clerk-Recorder
County Administration South Building, 601 N. Ross Street
Santa Ana, CA, 92701

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Hugh Nguyen:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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April 2, 2026

Benjamin Siegel
City Manager
32400 Paseo Adelanto
San Juan Capistrano, CA, 92675

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Benjamin Siegel:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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Sherry Wanninger
DIRECTOR

April 2, 2026

Rick Shintaku
General Manager
31592 West Street
Laguna Beach, CA, 92651

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Rick Shintaku:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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Sherry Wanninger
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April 2, 2026

Robert Grantham
General Manager
26111 Antonio Parkway
Rancho Santa Margarita, CA, 92688

Subject: Moulton Niguel Water District 2025 Urban Water Management Plan and Water Shortage Contingency Plan Update; Notice of Review and Changes

Dear Robert Grantham:

The Moulton Niguel Water District (District) has updated its Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in accordance with the California Urban Water Management Planning Act, the Water Conservation Act of 2009, and other applicable laws. The District is providing this notice pursuant to Water Code section 10621(b), which requires the District to notify the cities and county within its service area of the updates at least sixty days prior to holding a public hearing for the District's Board of Directors to consider adopting and submitting its 2025 UWMP and WSCP to the California Department of Water Resources before the July 1 deadline.

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Sincerely,



Laura Rocha
Water Resources Manager

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DIRECTOR

0011788002

BEST BEST & KRIEGER LLP
PO BOX 1028
RIVERSIDE, California 92502

**PROOF OF PUBLICATION
(2015.5 C.C.P.)**

**STATE OF CALIFORNIA
County of Orange**

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not party to or interested in the above-entitled matter. I am the principal clerk of the printer of The Orange County Register, a newspaper of general circulation, printed and published in the City of Irvine*, County of Orange, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Orange, State of California, under the date of November 19, 1905, Case No.A-21046. The notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

05/17/2026, 05/24/2026

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Irvine, California

On this 24th day of May, 2026.



Signature

**MOULTON NIGUEL WATER DISTRICT
NOTICE OF PUBLIC HEARING
2026 WATER SHORTAGE CONTINGENCY PLAN**

NOTICE IS HEREBY GIVEN that on June 11, 2026, at 6:00 PM in the meeting room of the Board of Directors of the Moulton Niguel Water District (District), 26161 Gordon Rd, Laguna Hills, CA, 92653, the Board of Directors of the District will conduct a public hearing pursuant to California Water Code Section 10642 to consider and receive comments and input on the District's Water Shortage Contingency Plan (WSCP). Members of the public may provide comments in person or in writing.

The Draft WSCP documents the District's plans to manage and mitigate an actual water shortage condition, should one occur because of drought or other impacts on water supplies. A copy of the District's Draft 2026 WSCP is available for public review on the District's website at <https://www.mnwd.com/reports-publications/>. The District's 2026 WSCP has been developed for implementation in accordance with the requirements of the Urban Water Management Planning Act, California Water Code Sections 10610 through 10657. Public input from diverse social, cultural, and economic elements of the population is encouraged and will be considered as part of the 2026 WSCP process. Input from and coordination with the County of Orange, the cities within which the District provides water supplies, and other public agencies will be considered throughout the process. (Water Code Sections 10620(d)(3); 10621(b); 10642.)

Any written comments regarding the Draft 2026 WSCP should be submitted no later than 5:00 p.m. on June 2, 2026, to the address set forth above or via email at mlindsay@mnwd.com, attention Marina Lindsay, Senior Water Resources Analyst. Public comments are also permitted at the public hearing at the time and place first set forth above. Upon conclusion of the public hearing, the Board of Directors of the District may revise, change, modify, and/or adopt the 2026 WSCP. Questions regarding the public hearing or the 2026 WSCP, should be directed to Marina Lindsay at mlindsay@mnwd.com. If you are disabled and need accommodation to participate in the public hearing, please call the District's Board Secretary at (949) 831-2500 for assistance at least three (3) working days prior to the hearing so that reasonable accommodations can be made.

**The Orange County Register
Published: 5/17, 5/24/26**

0011788010

BEST BEST & KRIEGER LLP
PO BOX 1028
RIVERSIDE, California 92502

**PROOF OF PUBLICATION
(2015.5 C.C.P.)**

**STATE OF CALIFORNIA
County of Orange**

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not party to or interested in the above-entitled matter. I am the principal clerk of the printer of The Orange County Register, a newspaper of general circulation, printed and published in the City of Irvine*, County of Orange, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of County of Orange, State of California, under the date of November 19, 1905, Case No.A-21046. The notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

05/17/2026, 05/24/2026

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Dated at Irvine, California

On this 24th day of May, 2026.



Signature

**MOULTON NIGUEL WATER DISTRICT
NOTICE OF PUBLIC HEARING
2025 URBAN WATER MANAGEMENT PLAN**

NOTICE IS HEREBY GIVEN that on June 11, 2026 at 6:00 PM in the meeting room of the Board of Directors of the Moulton Niguel Water District (District), 26161 Gordon Rd, Laguna Hills, CA, 92653, the Board of Directors of the District will conduct a public hearing pursuant to California Water Code Section 10642 to consider and receive comments and input on the District's 2025 Urban Water Management Plan (UWMP). In compliance with California Water Code (Sections 10610-10657) the UWMP is required to contain detailed evaluations of the water supplies necessary to reliably meet demands over at least a 20-year period in both normal and dry years. Members of the public may provide comments in person or in writing. Public input from diverse social, cultural, and economic elements of the population is encouraged and will be considered during the finalization of the 2025 UWMP.

The Draft 2025 UWMP documents the District's plans to ensure adequate water supplies to meet existing and future demands under a range of water supply conditions, including water shortages. A copy of the District's Draft 2025 UWMP is available for public review on the District's website at <https://www.mnwd.com/reports-publications/>. The District's 2025 UWMP has been developed for implementation in accordance with the requirements of the Urban Water Management Planning Act, California Water Code Sections 10610 through 10657, and the Water Conservation Act of 2009, California Water Code Sections 10608 through 10608.64. Input from and coordination with the County of Orange, the cities within which the District provides water supplies, and other public agencies will be considered throughout the process. (Water Code Sections 10620(d) (3); 10621(b); 10642.)

Any written comments regarding the Draft 2025 UWMP should be submitted no later than 5:00 p.m. on June 2, 2026, to the address set forth above or via email at mlindsay@mnwd.com, attention Marina Lindsay, Senior Water Resources Analyst. Public comments are also permitted at the public hearing at the time and place first set forth above. Upon conclusion of the public hearing, the Board of Directors of the District may revise, change, modify, and/or adopt the 2025 UWMP. Questions regarding the public hearing or the 2025 UWMP, should be directed to Marina Lindsay at mlindsay@mnwd.com. If you are disabled and need accommodation to participate in the public hearing, please call the District's Board Secretary at (949) 831-2500 for assistance at least three (3) working days prior to the hearing so that reasonable accommodations can be made.

**The Orange County Register
Published: 5/17, 5/24/26**

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Appendix G

UWMP Resolution



RESOLUTION NO. 26-12

RESOLUTION OF THE BOARD OF DIRECTORS OF THE MOULTON NIGUEL WATER DISTRICT ADOPTING THE 2025 URBAN WATER MANAGEMENT PLAN

WHEREAS, the Urban Water Management Planning Act (Water Code, Part 2.6, Section 10610 et seq.) (Act) mandates that every urban water supplier 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, prepare an Urban Water Management Plan (UWMP) and update its Urban Water Management Plan at least once every five years on or before July 1 in years ending in one and six; and

WHEREAS, pursuant to the Act, urban water suppliers are required to update and electronically submit their 2025 UWMPs to the California Department of Water Resources by July 1, 2026; and

WHEREAS, pursuant to Senate Bill (SB) X7-7 (Water Code section 10608 et seq.), an “urban retail water supplier” is defined as a water supplier 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; and

WHEREAS, the Moulton Niguel Water District (District) is an urban retail water supplier for purposes of the requirements of the Act and SB X7-7 ; and

WHEREAS, in accordance with the Act and SB X7-7 , the District has prepared its 2025 UWMP and has undertaken certain coordination, notice, public involvement, public comment, and other procedures in relation to its 2025 UWMP; and

WHEREAS, as authorized by Section 10620(e) of the Act, the District has prepared its 2025 UWMP with its own staff and in cooperation with other governmental agencies, and has utilized and relied upon industry standards and the expertise of industry professionals in preparing its 2025 UWMP, and has also utilized and relied upon the California Department of Water Resources Urban Water Management Plan Guidebook 2025 (March 2026), including its related appendices; and

WHEREAS, in accordance with applicable law, including Water Code section 10621(b), a Notice of Plan Preparation was sent to the county and cities within the service area which the District provides water supplies at least 60 days before the required public hearing on its 2025 UWMP; and

WHEREAS, in accordance with applicable law, including Water Code section 10642, and Government Code section 6066, a properly noticed public hearing regarding the District’s 2025 UWMP was conducted by the District’s Board of Directors on June 11, 2026 in order to

provide members of the public and other interested entities with the opportunity to be heard in connection with the 2025 UWMP and the proposed adoption thereof; and

WHEREAS, pursuant to said public hearing on the 2025 UWMP, the District, among other things, encouraged the active involvement of diverse social, cultural, and economic members of the community within the District's service area with regard to the preparation of the 2025 UWMP; and

WHEREAS, the Board of Directors of the District has reviewed and considered the purposes and requirements of the Act and SB X7-7, the contents of its 2025 UWMP, and the documentation contained in the administrative record in support of its 2025 UWMP and has determined that the factual analyses and conclusions set forth in its 2025 UWMP are supported by substantial evidence; and

WHEREAS, this activity is exempt from the California Environmental Quality Act (CEQA) pursuant to section 10652 of the California Water Code, as this activity involves the preparation and adoption, including addenda thereto, of an UWMP.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the Moulton Niguel Water District as follows:

SECTION 1. The Board of Directors approves and adopts the District's 2025 UWMP, a final copy of which is attached hereto as Exhibit "A."

SECTION 2. The General Manager is hereby authorized and directed to include a copy of this Resolution in the 2025 UWMP and, in accordance with Water Code sections 10621(d) 10644(a), to electronically submit a copy of the 2025 UWMP to the California Department of Water Resources no later than July 1, 2026.

SECTION 3. The General Manager is hereby authorized and directed, in accordance with Water Code section 10644(a) to submit a copy of the 2025 UWMP to the California State Library within thirty (30) days after this adoption date.

SECTION 4. The General Manager is hereby authorized and directed, in accordance with Water Code section 10644(a) to submit a copy of the 2025 UWMP to any city or county within which the District provides water supplies within thirty (30) days after this adoption date.

SECTION 5. The General Manager is hereby authorized and directed, in accordance with Water Code section 10645, to make the 2025 UWMP available for public review on the District's website at <https://www.mnwd.com/aboutmnwd/reports-publications/> and at the District's office during normal business hours not later than thirty (30) days after filing a copy thereof with the California Department of Water Resources.

SECTION 6. The General Manager is hereby authorized and directed to recommend to the Board of Directors additional steps necessary or appropriate to effectively carry out the implementation of the 2025 UWMP in accordance with the Urban Water Management Planning Act and SB X7-7.

SECTION 7. The Board of Directors finds and determines that this resolution is not subject to CEQA pursuant to Water Code Section 10652 because CEQA does not apply to the preparation and adoption of an UWMP.

SECTION 8. Pursuant to CEQA, the Board of Directors directs staff to file a Notice of Exemption with the Orange County Clerk's office within five (5) working days of adoption of this resolution.

SECTION 9. The document and materials that constitute the record of proceedings on which this resolution and the above findings have been based are located at Orange County Clerk's office at County Administration South Building, 601 N. Ross Street, Santa Ana, CA 92701. The custodian for these records is the Board Secretary.

APPROVED, SIGNED AND ADOPTED this 11th day of June 2026

MOULTON NIGUEL WATER DISTRICT



President

MOULTON NIGUEL WATER DISTRICT
and the Board of Directors thereof



Secretary

MOULTON NIGUEL WATER DISTRICT
and the Board of Directors thereof

STATE OF CALIFORNIA)
) ss.
COUNTY OF ORANGE)

I, PAIGE GULCK, Secretary of the Board of Directors of the MOULTON
NIGUEL WATER DISTRICT, do hereby certify that the foregoing Resolution was duly
adopted by the Board of Directors of said District at a regular meeting of said Board held
on the 11th day of June 2026 that it was so adopted by the following vote:

AYES: FROELICH, MOORHEAD, PARKER, PROBOLSKY, RIFKIN,
WANNINGER

NOES:

ABSTAIN:

ABSENT: FIORE



Paige Gulck, Secretary
MOULTON NIGUEL WATER DISTRICT
and of the Board of Directors thereof