2025 Urban Water Management Plan

Draft

MAY 2026 | MANHATTAN BEACH

MANHATTAN BEACH

2025 Urban Water Management Plan

MAY 2026

DRAFT

ENGINEER STAMP

Prepared by Water Systems Consulting, Inc

WSC

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ACRONYMS & ABBREVIATIONS

°F	Degrees Fahrenheit
AF	Acre Foot
AFY	Acre Feet per Year
AKWWRF	A.K. Warren Water Resource Facility
AWWA	American Water Works Association
CII	Commercial, Industrial, and Institutional
CIMIS	California Irrigation Management Irrigation System
CWC	California Water Code
DMM	Demand Management Measure
DRA	Drought Risk Assessment
DWR	California Department of Water Resources
ECLWRF	Edward C. Little Water Recycling Facility
GPCD	Gallons per Capita per Day
KWH	Kilowatt hours
LACSD	Los Angeles County Sanitation Districts
MGD	Million Gallons per Day
MWD	Metropolitan Water District of Southern California
RHNA	Regional Housing Needs Assessment
SCAG	Southern California Association of Governments
SWP	State Water Project
UWMP	Urban Water Management Plan
UWUO	Urban Water Use Objective
WBMWD	West Basin Municipal Water District
WRD	Water Replenishment District of Southern California
WRP	Water Reclamation Plant
WSAP	Water Supply Allocation Plan
WSCP	Water Shortage Contingency Plan

1 Introduction and Lay Description

This section provides a brief overview of the City of Manhattan Beach and the purpose of this 2025 Urban Water Management Plan. It also describes how the Urban Water Management Plan is organized and its relationship to local and regional planning efforts in which Manhattan Beach is involved.

IN THIS SECTION

1.1 Introduction

This document presents the 2025 Urban Water Management Plan (UWMP) for the city of Manhattan Beach (Manhattan Beach) water service area. This chapter describes the general purpose of the UWMP and discusses UWMP adoption and implementation.

Manhattan Beach is located on the western edge of Los Angeles County, approximately 22 miles southwest of downtown Los Angeles. The city is comprised of approximately 3.9 square miles of primarily residential land use. Manhattan Beach supplies water to approximately 34,051 residents.

Water production infrastructure includes two groundwater wells (Well 11A and Well 15) and a groundwater treatment facility. The remaining water supply is imported water purchased from West Basin Municipal Water District (WBMWD) and produced by Metropolitan Water District of Southern California (MWD).

1.2 California Water Code

In 1983, the State of California Legislature enacted the Urban Water Management Planning Act (UWMP Act). The law required an urban water supplier providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet per year (AFY) to adopt a UWMP every five years. This UWMP must demonstrate water supply reliability under both normal and drought conditions. The UWMP Act applies to wholesale and retail water suppliers.

Since the original UWMP Act was passed, it has undergone significant expansion. Prolonged droughts, groundwater overdraft, regulatory revisions, and changing climatic conditions affect the reliability of each water supplier as well as statewide water reliability overseen by California Department of Water Resources (DWR), the State Water Resources Control Board, and the California Legislature. Accordingly, the UWMP Act has grown to address changing conditions. The current requirements are found in Sections 10610-10656 and 10608 of the California Water Code (CWC).

DWR provides guidance for urban water suppliers by preparing a UWMP Guidebook, conducting workshops, developing tools, and providing program staff to help water suppliers prepare comprehensive and useful water management plans, implement water conservation programs, and understand the requirements of CWC. Suppliers prepare their own UWMPs and submit them to DWR. DWR then reviews the plans to make sure they have addressed the requirements; they submit a report to the California Legislature summarizing the status of the plans for each five-year cycle. The DWR 2025 UWMP Guidebook, released in February 2026, was used to develop this 2025 UWMP.

The purpose of this UWMP is for the city to evaluate long-term resource planning and establish management measures to ensure adequate water supplies are available to meet existing and future demands. The UWMP provides a framework to help water suppliers maintain efficient use of urban water supplies, promote conservation programs and policies, ensure that sufficient

water supplies are available for future beneficial use, and provide a response mechanism during drought conditions or other water supply shortages.

The UWMP is a valuable planning tool used for multiple purposes, including:

- Providing a standardized methodology for water utilities to assess their water resource needs and availability.
- Serving as a resource to the community and other interested parties regarding water supply and demand, conservation, and other water-related information.
- Providing a key source of information for cities and counties when considering approval of proposed new developments and preparing regional long-range planning documents, such as city and county General Plans.
- Informing other regional and statewide water planning efforts, such as Integrated Regional Water Management Plans and the California Water Plan.

CWC 10632 also includes requirements for suppliers to prepare a Water Shortage Contingency Plan (WSCP). The WSCP documents a supplier's plans to manage and mitigate an actual water shortage condition, should one occur because of drought or other impacts on water supplies. The WSCP is a standalone document that can be updated independently of the UWMP but is referenced and attached to the 2025 UWMP. The WSCP is provided in Appendix C.

1.3 UWMP Organization and Lay Description

The following provides an overview and key findings of each section of the 2025 UWMP:

Section 1 – Introduction and Lay Description

This section provides background information on the UWMP process and regulatory requirements and provides an overview of the information covered throughout the remaining sections. Water suppliers that serve more than 3,000 customers or 3,000 AFY (such as Manhattan Beach) are required to prepare a UWMP. The UWMP is an important tool that details the city's system and service area, estimates supply and demand over a 25-year period, and analyzes reliability under different potential conditions.

Section 2 – Plan Preparation

This section provides information on why a UWMP is required, the processes used to develop the UWMP, and an overview of the coordination and outreach efforts the city undertook to solicit diverse feedback and meet applicable requirements.

Section 3 – System Description

The section describes the city's water system and service area, which covers about 4 square miles and serves the city's population of approximately 34,000 people. It summarizes key infrastructure (140 miles of water pipelines, 4 booster pump stations, 3 storage reservoirs, 3 emergency connections) and explains that the city supplements local groundwater supply by purchasing imported and recycled water through WBMWD. This section also characterizes local population projections that reflect planned development and Regional Housing Needs Allocation

(RHNA) housing targets that have been incorporated into the city's Housing Element and recent Development Impact Fee Study. Finally, it outlines land use within the service area, which is largely residential.

Section 4 – System Water Use

This section characterizes the city's current and projected water demand by summarizing recent potable and recycled water use. This section describes a methodology and forecasts demand through 2050 based on baseline use by customer type, anticipated conservation savings, and planned development. 2025 total demand was 4,750 AF and demand is projected to rise to 5,301 AF by 2040 before declining to 5,257 AF by 2050. Near-term growth is driven primarily by expected population growth, but the projections also incorporate assumed conservation, employment growth, and account for system water losses. The section also provides a focused five-year outlook (2026–2030), anticipating a potential increase of 305 AFY from 2025 levels, and includes a summary of lower-income household demand.

Section 5 – Baseline and Targets

This section describes compliance with the Water Conservation Act of 2009, also known as Senate Bill 7 of Special Extended Session 7 (SBX7-7). SBX7-7 required all water suppliers to increase water use efficiency and decrease per-capita water consumption by 20% by the year 2020. To meet this requirement, the city established a water use baseline and efficiency targets in its 2015 UWMP. This section discusses compliance and confirms that the city met its 2020 water use target of 144 gallons per capita per day.

Section 6 – System Supplies

This section summarizes the city's historic and projected water supplies and provides a detailed overview of the city's water supplies and their associated reliability and potential future constraints. The city's water supplies include groundwater pumped from the West Coast Groundwater Basin along with imported water and recycled water purchased from WBMWD. Over the past 5 years (2021–2025), the city's groundwater production fluctuated between 81 – 423 AFY. In 2025, the city used 4,037 AF of imported water, 338 AF of groundwater, and 374 AF of recycled water to meet demands. Looking to the future, the city projects increasing groundwater pumping to their total adjudicated pumping right of 1,131 AFY. Increased groundwater pumping would reduce reliance on imported supplies, demand for which is projected to reduce to around 3,550 AF in 2030 and then gradually rise and eventually stabilize around 3,752 AF by 2050.

Section 7 – Water Supply Reliability

The section summarizes required reliability analyses that evaluate whether projected supplies can meet projected demands under varying conditions. Based on the city's and its wholesaler's planning assumptions, the results of the analysis indicate that future supply is adequate to meet future demand and no water shortages are anticipated across the planning horizon. These findings rely heavily on MWD's 2025 UWMP in which they anticipated being able to meet all imported water demands from their customers, which include WBMWD. The drought risk

assessment also concludes the city is anticipated to be able to meet demand without shortages during an immediate five-year drought, were one to occur over the next five years.

Section 8 – Water Shortage Contingency Plan

This section includes an overview of the standalone WSCP. The WSCP provides guidance on declaring a water shortage and how to mitigate water shortages. The WSCP defines levels of water shortage and outlines the actions that will be required of customers during each stage. The complete WSCP is included as Appendix C.

Section 9 – Demand Management Measures

This section summarizes the city's demand management measures, both local programs and those implemented regionally through WBMWD, to reduce water use and improve long-term supply reliability. It explains that the city enforces permanent water-waste prohibitions, maintains universal customer metering, and uses outreach to discourage inefficient use. The city is an active supporter and participant in WBMWD's conservation and education programs (e.g., rebates, turf replacement support, rain barrels, workshops, and public information campaigns), and that participation is reflected in WBMWD's UWMP reporting. These measures are foundational to meeting past and future State conservation requirements (including the Urban Water Use Objective) and strengthening drought resiliency.

Section 10 – Plan Adoption

Chapter 10 briefly outlines the steps taken to adopt and submit the UWMP and make it publicly available. This chapter also discusses the agency's plan to implement the UWMP.

1.4 UWMPs in Relation to Other Efforts

This UWMP characterizes water use, estimates future demands and supply sources, and evaluates supply reliability for normal, single-dry, and five consecutive dry years. The UWMP also requires a standalone WSCP, which is provided in Appendix C. In addition to the 2025 UWMP, Manhattan Beach is involved in several internal and external planning efforts. Manhattan Beach collaborates with a variety of stakeholders to achieve consistency between various planning documents locally and regionally. Documents that were leveraged in preparation of this UWMP are:

- Urban Water Management Planning Guidebook (DWR, 2026)
- WBMWD 2025 UWMP (WSC, 2026)
- Manhattan Beach Draft Development Impact Fee Nexus Study (Harris & Associates, 2026)
- Manhattan Beach Climate Action and Adaptation Plan (ESA, 2025)
- Manhattan Beach Water Master Plan Update (Stantec, 2021)
- Manhattan Beach 2020 UWMP (Stetson, 2021)

1.5 Consistency with the Delta Plan for Participants in Covered Actions

Under the Sacramento-San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a covered action in the Sacramento-San Joaquin Delta (the Delta), prior to initiating the implementation of that action, must prepare a written certification of consistency. This certification, which includes detailed findings as to whether the covered action is consistent with applicable Delta Plan policies, must be submitted to the Delta Stewardship Council.

An urban water supplier that anticipates participating in or receiving water from a proposed covered action, such as a multiyear water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Delta, should demonstrate consistency with the Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

SB X7-1, which was signed in 2009, reformed Delta policy and governance. The legislation requires the development, adoption, and implementation of a “Delta Plan.” It also establishes a statewide policy to reduce reliance on the Delta in meeting California’s future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency.

DWR does not review this analysis; therefore, this information has been prepared as a stand-alone document and is attached as Appendix D. The analysis and documentation provided in the appendix include the elements described in WR P1(c)(1) that need to be included in a water supplier’s UWMP to support a certification of consistency for a future covered action.

2 Plan Preparation

This section provides information on why a UWMP is required, the processes used to develop the UWMP, and an overview of the coordination and outreach efforts the city undertook to solicit diverse feedback and meet applicable requirements.

IN THIS SECTION

2.1 Basis for Preparing a Plan

Manhattan Beach's 2025 UWMP was prepared in accordance with the UWMP Act which was established in 1983. The UWMP Act requires every "urban water supplier" to prepare and adopt a 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 or supplying more than 3,000 AFY.

Manhattan Beach is an "urban water supplier" pursuant to Section 10617 of CWC and directly serves potable water to more than 3,000 customers and supplies more than 3,000 AFY at retail for municipal purposes. Manhattan Beach's 2025 UWMP is an update to the city's 2020 UWMP (Stetson, 2021).

Pursuant to CWC requirements, the city's 2025 UWMP incorporates DWR's standardized tables for the reporting and submittal of UWMP data. The standardized tables are provided in Appendix B. The city also submitted the UWMP data (from the standardized tables) electronically through DWR's Online Submittal Tool.

Manhattan Beach is a Public Water System and is regulated by the State Water Resources Control Board - Division of Drinking Water, who requires water agencies to provide the number of connections, water usage, and other information annually. In 2025, the city supplied 4,750 acre-feet per year of water and had 13,518 municipal connections.

Manhattan Beach's 2025 UWMP has been prepared using calendar years and water use is AF. Per capita water use is reported as gallons per capita per day (GPCD).

2.2 Regional Planning

While Manhattan Beach closely collaborates with WBMWD, the city has prepared an individual 2025 UWMP. The goal of this UWMP is to address all the requirements of CWC.

2.3 Coordination and Outreach

Manhattan Beach has provided WBMWD, the city's water wholesaler, with projected water use in accordance with CWC 10631 and has relied upon water supply information provided by WBMWD, as well as from MWD in preparing its 2025 UWMP.

Table 2-1 lists the entities that Manhattan Beach coordinated with in the development of the 2025 UWMP. Manhattan Beach's water supply planning considers the programs of local and regional water agencies. This UWMP details the specifics as they relate to the city's water service area and refers to MWD, WBMWD, the Water Replenishment District of Southern California (WRD) and other agencies throughout.

Table 2-1: Coordination and Public Involvement

AGENCY	CUSTOMER MEETING / WORKSHOP	60-DAY NOTIFICATION	COPY OF DRAFT UWMP
West Basin Municipal Water District	✓	✓	✓
Los Angeles County Water Resources Division		✓	✓
California Water Service		✓	✓
City of El Segundo		✓	✓
Water Replenishment District		✓	✓

For its long-term water supply, Manhattan Beach relies on imported water from MWD through WBMWD and groundwater from the West Coast Groundwater Basin, which is managed by WRD. The city's water supply planning is partially based on the policies, rules, and regulations of these three water agencies. The city also receives recycled water from WBMWD.

Development of Manhattan Beach's 2025 UWMP was coordinated with WRD and WBMWD and, pursuant to CWC 10621(b), Los Angeles County was notified of the opportunity to review the UWMP. In accordance with CWC Section 10642, Manhattan Beach will make the UWMP and WSCP available for public review and will conduct a public hearing with notice provided pursuant to Government Code Section 6066. Public notice will be published for two successive weeks and will identify the time and location of the hearing as well as where the Draft UWMP may be reviewed. The draft UWMP will also be made available on the city's website to facilitate public access and participation.

See Appendix E for copies of all notifications.

3 System Description

This section describes Manhattan Beach's water system, service area, population demographics, local climate, and land uses.

IN THIS SECTION

3.1 General Description

Manhattan Beach is located on the western edge of Los Angeles County, approximately 22 miles southwest of downtown Los Angeles. Manhattan Beach is bordered by the city of El Segundo to the north, the cities of Hawthorne and Redondo Beach to the east, and the cities of Redondo Beach and Hermosa Beach to the south. The city consists of approximately 3.9 square miles and land use is primarily residential. Commercial land uses are located along Highland Avenue, Manhattan Beach Boulevard, Sepulveda Boulevard, and in Manhattan Village, which is located southeast of Rosecrans Avenue and Sepulveda Boulevard. Industrial land uses primarily consists of Northrop Grumman and Raleigh Studios, which are located northwest of Aviation Boulevard and Marine Avenue. The city is a retail agency within WBMWD's service area. Manhattan Beach, along with Hermosa Beach, Lomita, Manhattan Beach, Redondo Beach, a portion of Torrance, and the unincorporated Los Angeles County area of West Carson constitute Division 2 of the WBMWD's five divisions. An overview of the city and the city's location is shown in Figure 3-1.

Figure 3-1: City Detail Map

Source: Manhattan Beach

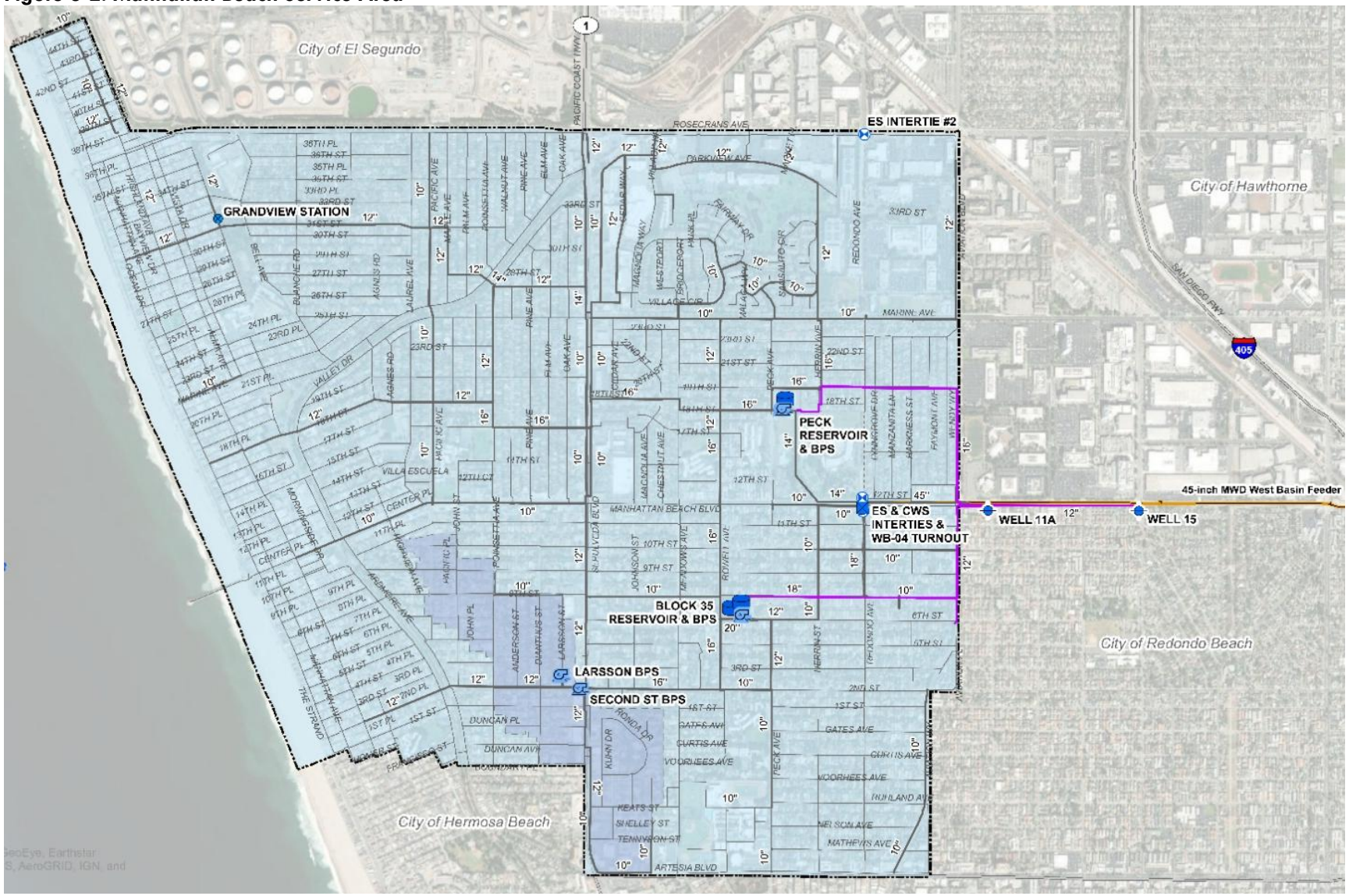
3.2 Service Area Boundary Map

The water service area covers 100 percent of the population residing within the city limits. Figure 3-2 shows the city's service area boundary map and surrounding area which encompasses approximately 3.9 square miles.

The city operates and maintains an extensive water conveyance system, including approximately 140 miles of water pipelines, 4 booster pump stations, 3 storage reservoirs, 2 emergency connections with the city of El Segundo, and one emergency connection with California Water Service's transmission main.

The city purchases recycled water from WBMWD. The WBMWD recycling plant located in El Segundo, the Edward C. Little Water Recycling Facility (ECLWRF), provides tertiary treatment to secondary-treated wastewater received from the City of Los Angeles' Hyperion Water Reclamation Plant (WRP) to produce recycled water that meets California Title 22 treatment requirements.

Figure 3-2: Manhattan Beach Service Area



Source: Manhattan Beach Water Master Plan (Stantec, 2021)

3.3 Service Area Climate

Manhattan Beach has a Mediterranean climate with moderate, dry summers and cool winters in which most rain falls. The climate for the city is consistent with coastal Southern California. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. As a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds.

The city's service area climate is a mild, Mediterranean environment. Climate data from the California Irrigation Management Information System (CIMIS) Station 99 Santa Monica from January 1993 through December 2025 was used to evaluate the local climate conditions. On average, the annual total precipitation is 14.5 inches, with most of the precipitation occurring between December and March. Records show that the monthly average precipitation ranges from 0.1 inches to 4.1 inches. The annual average total evapotranspiration is 48.1 inches with the highest evapotranspiration is experienced between April and September and the peak occurring in July. The city's monthly average temperature ranges from 56 to 68 degrees Fahrenheit (°F), with an average annual temperature of 62°F. Figure 3-3 shows the annual precipitation from 1993 through 2025 and illustrates which years fall above or below the annual average precipitation for this period. Table 3-1 shows the monthly averages for precipitation, evapotranspiration, and temperature.

Figure 3-3: Annual Precipitation from 1993-2025

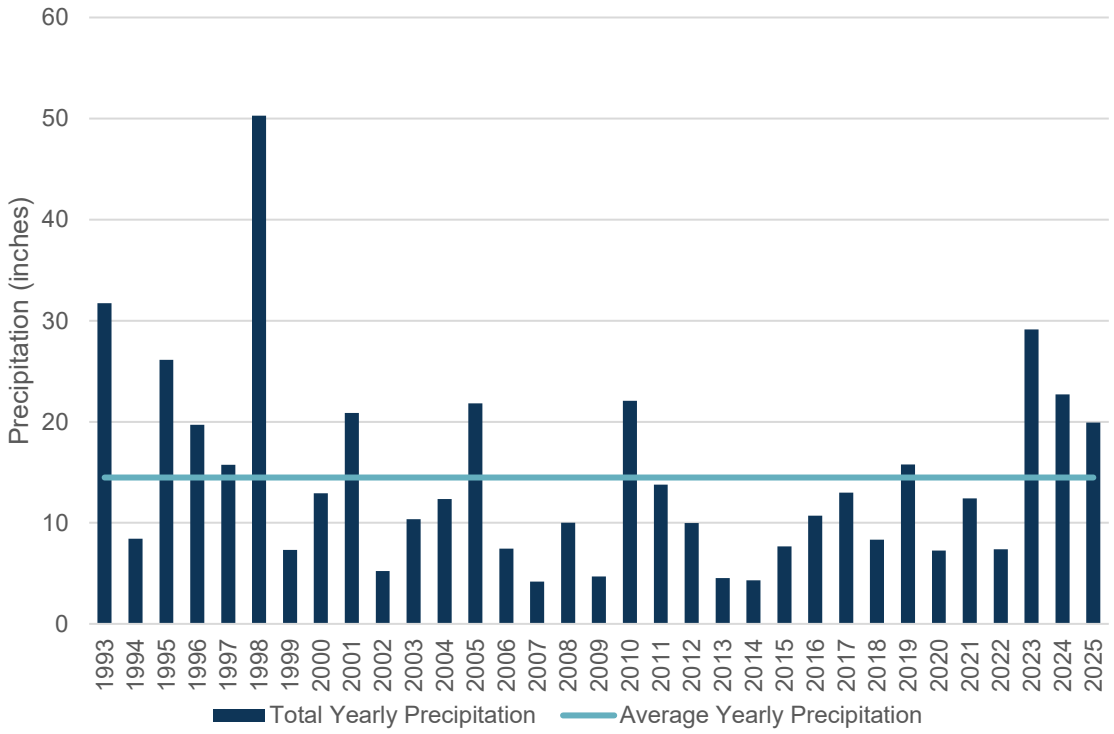


Table 3-1: Average Monthly Climate Data

MONTH	AVERAGE PRECIPITATION (INCHES)	AVERAGE EVAPOTRANSPIRATION (INCHES)	AVERAGE AIR TEMPERATURE (°F)
January	3.2	2.4	57.3
February	4.1	2.6	56.4
March	2.1	3.8	57.5
April	0.6	4.8	59.3
May	0.4	5.1	61.1
June	0.1	5.2	63.9
July	0.1	5.8	67.0
August	0.2	5.7	68.2
September	0.2	4.4	67.9
October	0.3	3.6	65.0
November	0.8	2.6	60.8
December	2.2	2.1	56.9
ANNUAL AVERAGE:	**14.5**	**48.2**	**61.8**

Source: CIMIS Station No 99, monthly data from 1992 – 2025 (DWR, 2025)

3.4 Service Area Population

The estimated 2025 population served by the city is based on 2025 estimates from the California Department of Finance. Population projections for 2030-2050 were based on the city's future growth assumptions developed by the Community Development Department in the Development Impact Fee Nexus Study (Harris & Associates, 2026). Residential growth through buildout was derived from the city's certified 6th Cycle Housing Element, which includes accommodation for the city's Regional Housing Needs Allocation targets. The resulting estimated 2040 buildout population of over 38,600 is a 13% increase from current estimates, and slightly higher than previously projected buildout population in the previous UWMP. Current and projected population for the service area is provided in Table 3-2.

Table 3-2: Current and Projected Population

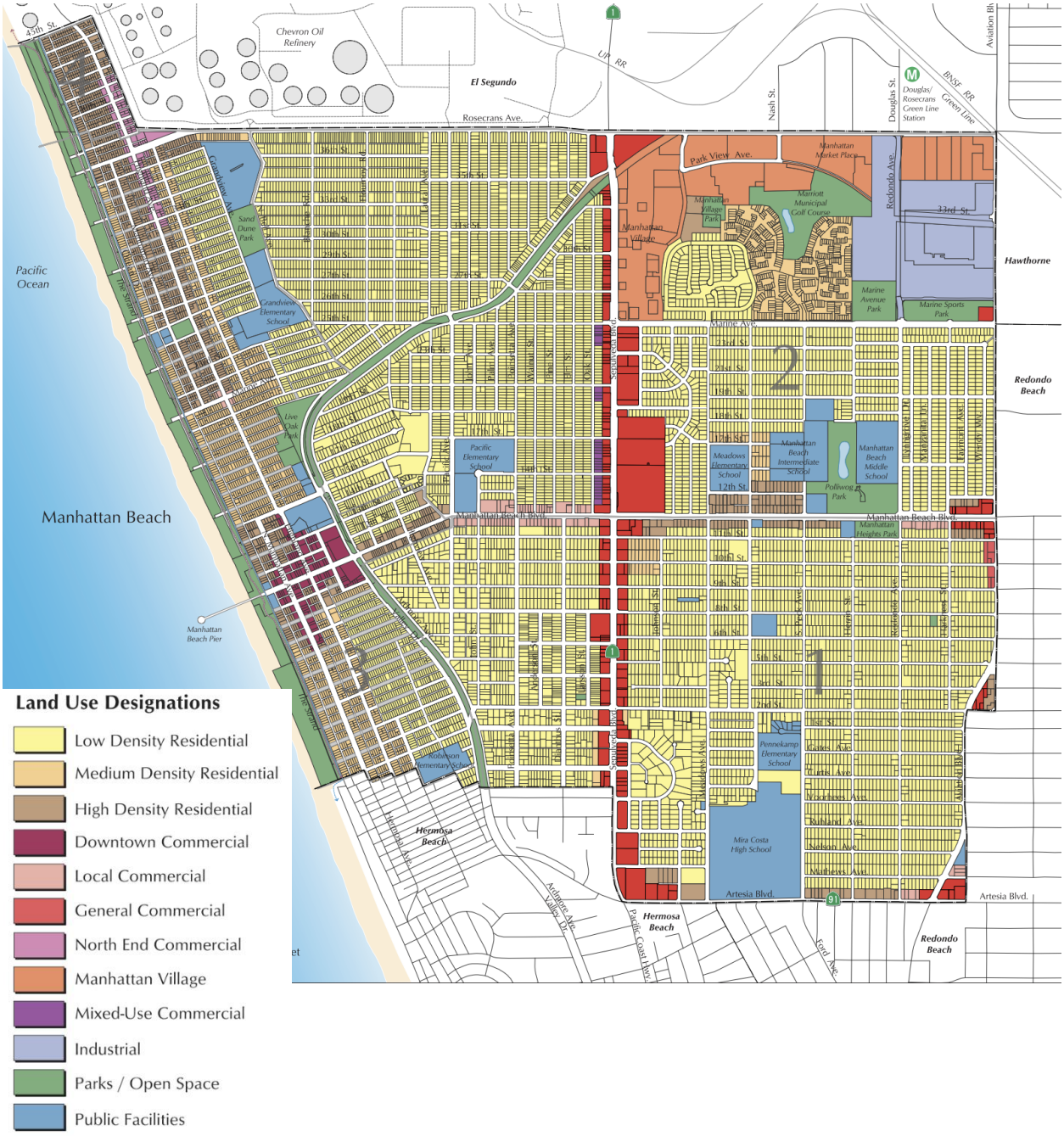
	2025	2030	2035	2040	2045	2050
Estimated Population	34,051	35,568	37,086	38,603	38,603	38,603

3.5 Land Uses within Service Area

Land use in the water service area is shown in Figure 3-4. The city reviewed the current and projected land uses within its service area during the preparation of this 2025 UWMP. The existing land uses within the city's service area include single family and multi-family residential, commercial, industrial, and landscape. The projected land uses within the city's service area are expected to remain similar to the existing land uses; however, there are several development projects underway to expand housing opportunity as described below:

- **1440 Rosecrans Avenue Apartment:** A 500-unit multifamily apartment complex has been proposed to replace an existing 78,000-square-foot office building on a 5.1-acre site along Rosecrans Avenue.
- **201-207 N Sepulveda Boulevard Residential Development:** This proposed project would replace a garden center with a seven-story residential building containing 60 apartments (studio through three-bedroom units).
- **250-400 N Sepulveda Boulevard Senior Living Facility:** A senior housing project is under construction with 95 units (115 beds total) and replaces three commercial structures.
- **1701 W. Artesia Boulevard Mixed-Use Development:** This small mixed-use project includes 12 condominium units above a ground-floor commercial space, replacing older residential and commercial structures.
- **401 Rosecrans/3770 Highland (Highrose El Porto / Project Verandas):** This proposed redevelopment would demolish a banquet facility and commercial building to construct a 79-unit multifamily residential building on a merged 43,648-square-foot parcel.
- **Downtown "Project Pulse" Redevelopment Planning:** The city is studying redevelopment opportunities for Parking Lot 3 (Morningside Drive & 12th Street) and the 400 Manhattan Beach Boulevard property through its "Project Pulse" initiative. The effort explores potential future uses such as mixed-use development, parking replacement, or community-serving facilities in the downtown area.

Figure 3-4: Land Use within Service Area



4 Water Use Characterization

This section describes and quantifies Manhattan Beach's past, current, and future water use through 2050. This section also provides discussion on water use for lower income households and climate change considerations.

IN THIS SECTION

- Historic and Projected Water Use
- Water Use for Lower Income Households
- Climate Change Considerations

4.1 Historic Water Use

Manhattan Beach has potable and non-potable water demands. In 2025, the city's total water demand was 4,750 AF consisting of 4,375 AF of potable demand and 374 AF of non-potable recycled water demand. The city tracks water sales by the following water use sectors listed in the California Water Code:

- **Single-family residential:** A single-family dwelling unit is a lot with a free-standing building containing one dwelling unit that may include a detached secondary dwelling.
- **Multi-family residential:** Multiple dwelling units are contained within one building or several buildings within one complex.
- **Commercial:** Commercial users are defined as water users that provide or distribute a product or service. For Manhattan Beach, commercial includes institutional users, which include higher education institutions, schools, courts, churches, hospitals, government facilities, nonprofit research institutions, and others.
- **Landscape:** Landscape connections supply water solely for landscape irrigation. Landscapes users may be associated with multi-family, commercial, industrial, or institutional/governmental sites, but are considered a separate water use sector if the connection is solely for landscape irrigation.
- **Industrial:** Water users that are primarily a manufacturer or processor of materials as defined by the North American Industry Classification System (NAICS) code sectors 31 to 33, inclusive, or an entity that is a water user primarily engaged in research and development.
- **Distribution system losses:** Distribution system losses represent the potable water losses from the pressurized water distribution system and water storage facilities, up to the point of delivery to the customers.

4.1.1 Past and Current Water Use

Total water use within Manhattan Beach's service area has declined over the past 25 years, in large part due to water conservation efforts and improvements in water use efficiency. Figure 4-1 shows total potable and non-potable water use over the past 25 years. Table 4-1 provides a summary of water sales by use category over the last five years. Over the past five years, the city's total water demands (including potable and recycled water) have ranged from 4,510 AFY to 5,051 AFY, with an average of 4,777 AFY.

Figure 4-1: Total Water Demand, Potable & Non-Potable

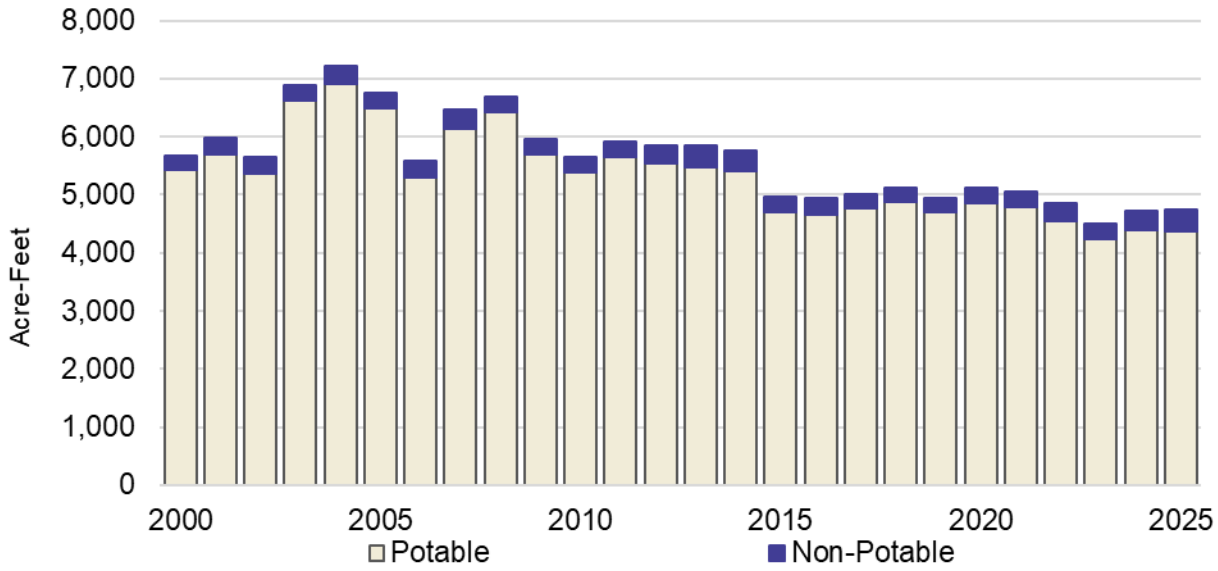


Table 4-1: Summary of Past Water Use (AF)

Use Category	2021	2022	2023	2024	2025
Single Family	3,235	2,895	2,686	2,797	2,892
Multi-Family	354	328	318	319	326
Commercial / Institutional	557	584	591	599	619
Industrial	244	214	226	227	243
Landscape	194	160	148	160	168
Losses	199	366	263	289	128
Potable Subtotal	4,584	4,181	3,968	4,104	4,375
Recycled Water	267	308	278	329	374
Non-Potable Subtotal	267	308	278	329	374
Total	**5,051**	**4,855**	**4,510**	**4,722**	**4,750**

4.1.2 Distribution System Water Losses

Distribution system water losses are the physical potable water losses from the point of water entry to the distribution system to the point of delivery to the customer's system. Water loss can result from aging infrastructure, leaks, seepage, theft, metering inaccuracies, data handling errors, and other causes. Addressing water losses can increase water supplies and recover revenue.

Manhattan Beach has submitted water loss audits to DWR annually since 2017. These water audits are completed on a fiscal year reporting cycle compared to the calendar year losses calculated here, which are the difference between consumption and production. Over the last five years, water losses have ranged from approximately 3% to 9%. Water loss estimates are summarized in Table 4-2.

Table 4-2: FY 2021-2025 Water Losses

	2021	2022	2023	2024	2025
Losses, AFY	199	366	263	289	128
Percentage of Losses	4.3%	8.8%	6.6%	7.1%	2.9%

Note: Losses are calculated for the calendar year. Water loss audits submitted to DWR report losses for the fiscal year.

4.2 Projected Water Use

Future water use projections must consider significant factors on water demand, such as development and/or redevelopment, and climate patterns, among other less significant factors that affect water demand. While population growth is expected to place upward pressure on water demand, the city anticipates that the gradual adoption of water-efficient fixtures and landscaping, along with increased public awareness of conservation practices and city-specific policies, is expected to reduce per-capita water use. These passive savings are expected to dampen, though not eliminate, the additional water demand associated with population growth.

Projected water use through 2050 was analyzed separately for potable and non-potable demand. Multiple different scenarios were developed and evaluated to establish a range of potential future outcomes. Historical data and trends were developed and analyzed alongside projections from various other sources. Trends and projections evaluated included:

- Average historical water use by customer type
- Historical and projected population, household, employment, and connection growth rates
- Review of major developments and associated demand projections
- Anticipated Urban Water Use Objective targets
- Historical and a range of potential future conservation scenarios

For the 2025 UWMP projections, the city identified a scenario that represented the most probable future scenario based on information known at this time. This scenario resulted in projected demands in the middle of the range between high and low demand scenarios. The major assumptions used to develop the potable demand projections are listed below:

Baseline Water Use: Baseline water use per connection was established for each connection type (single family residential, multifamily residential, commercial, etc.) based on 2021, 2022, 2023, 2024, and 2025 historic water use.

Growth Rate: Residential demand growth rates were based on the population projections described in Section 3.4, which assumed linear population growth from 2025 to buildout at 2040, in accordance with the city's Development Impact Fee Study and Housing Element. Projected commercial connection growth is based on employment projections developed by SCAG. Other connection types are based on historical trends. Commercial, industrial, and dedicated landscape connections follow historic connections growth.

Conservation: Future downward pressure on urban water use is expected to be driven by the "Making Water Conservation as a California Way of Life" Regulation which became effective January 1, 2025 and requires urban water suppliers to calculate its urban water use objective (UWUO) and demonstrate compliance with the UWUO beginning January 1, 2027. The UWUO includes the following:

- An indoor per-person water use goal of 55 gallons per day until 2025, 47 gallons from 2025 to 2030, and 42 gallons beginning in 2030
- A standard for residential outdoor and dedicated irrigation meter water use based on climate and landscaped area of the urban water provider. The landscape efficiency factors used to calculate the residential outdoor water budget is 0.8 through 2035, reduces to 0.63 from 2035 to 2040, and is 0.55 beginning 2040. The landscape efficiency factors used to calculate dedicated irrigation meter water budget are 0.8 from 2028 to 2035, 0.63 from 2035 to 2040, and 0.45 in 2040 and beyond.
- Supplier specific water distribution system water loss standard. The city's water loss standard is 3.77 gallons per service connection per day for real water losses and 7.61 gallons per service connection per day for apparent losses.

The city's estimated future UWUO was used for comparison among different scenarios of future conservation. For the selected projection scenario, a 0.1% reduction in water use every year was assumed to be achieved across every use category, which aligns with historical trends over the past 10 years. New connection water demand was assumed to be 10% more efficient than existing connections, based on estimated water savings due to California Plumbing Code modernization being implemented over time. However, it is anticipated that the city will need to increase future conservation rates to meet future projected UWUO targets. Additional background on the UWUO is included in Section 4.2.2.

The city's Municipal Code 7.44 "Water Conservation," which was created through Ordinance No. 15-0008, which was adopted in July 2015, includes methods for current and ongoing reduction in water use and water waste. The city does not have an active water conservation program, but customers in the service area can access conservation rebates and programs through WBMWD and expects passive conservation savings over time reflecting turnover of fixtures and irrigation equipment, code-driven water efficiency standards, and behavioral water savings.

Water Loss: Water losses over the past 5 years have ranged from approximately 3% to 9% of total production and have averaged 6%. For demand projections, future water loss was assumed to be 7% of total potable demand.

Recycled water: Recycled water demand was projected to remain consistent with the most recent five-year average demand.

Figure 4-2 visualizes the past 5 years of water demand by sector in comparison to the projection for the next 25 years based on the selected assumptions. Table 4-3 summarizes projected water demand by use type over the planning horizon.

Figure 4-2: Historic and Projected Water Demand, 2020-2050

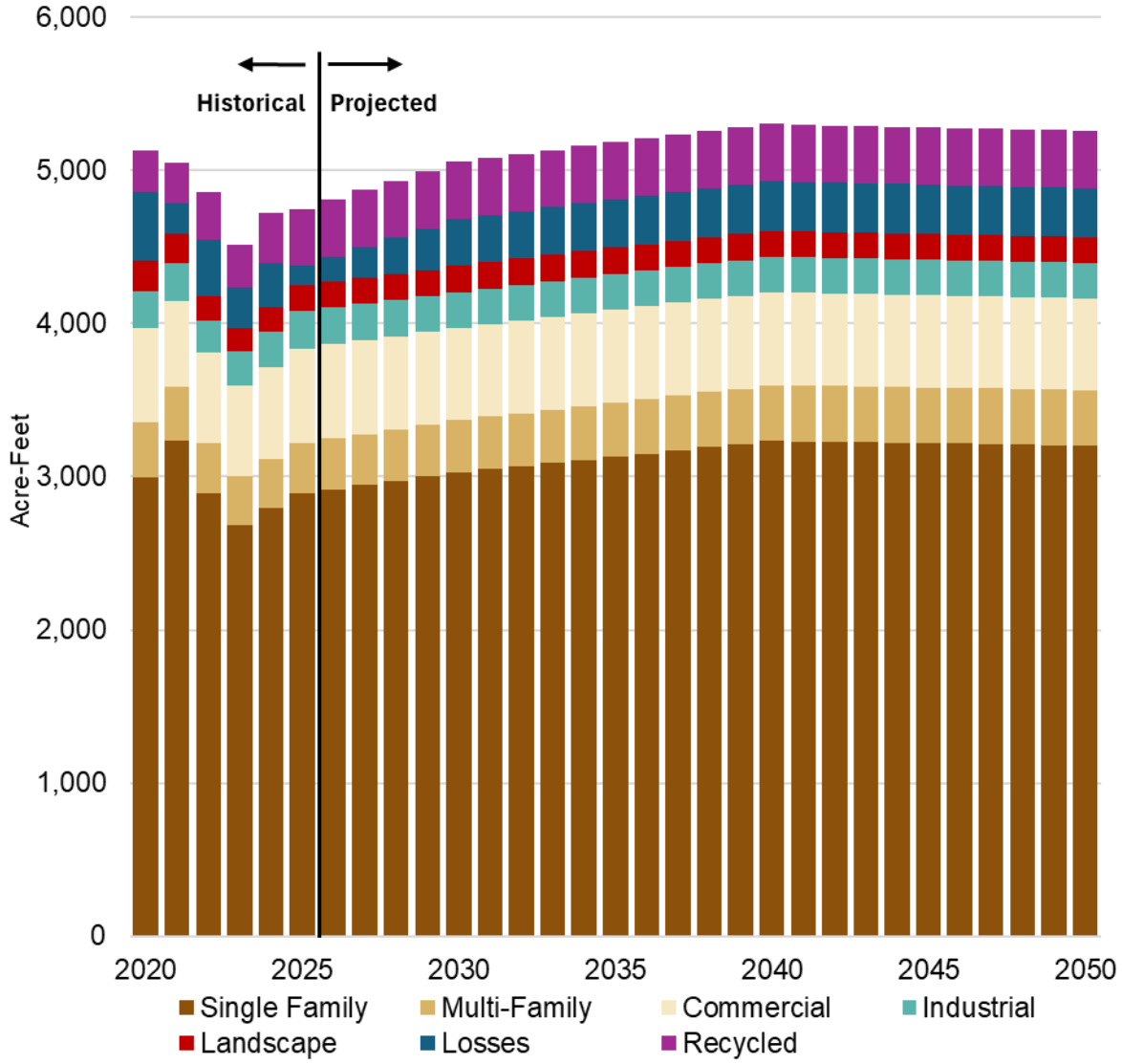


Table 4-3: Summary of Projected Water Use (AFY)

Use Type	Description	Treatment	2030	2035	2040	2045	2050
Single Family	Single-Family	Potable	3027	3130	3233	3218	3204
Multi-Family	Multi-Family	Potable	342	353	365	363	362
Commercial	Commercial	Potable	605	608	604	602	600
Industrial	Industrial	Potable	232	234	233	232	230
Landscape	Landscape Irrigation	Potable	169	170	170	169	168
Distribution System Water Loss	Nonrevenue	Potable	306	315	322	321	319
Other	Recycled Water	Non-Potable	374	374	374	374	374
		Total:	**5,055**	**5,184**	**5,301**	**5,279**	**5,257**

4.2.1 Characteristic Five-Year Water Use

In addition to past and projected uses, the UWMP more closely analyzes anticipated conditions for the next five years (2026 – 2030). In the next five years, the city anticipates that demand may increase by approximately 305 AFY compared to 2025 demand.

Table 4-4: Characteristic Five-Year Water Use (AFY)

Use Category	2026	2027	2028	2029	2030
Potable Water	4,436	4,497	4,559	4,620	4,681
Recycled Water	374	374	374	374	374
Total Demand	**4,810**	**4,871**	**4,932**	**4,994**	**5,055**

4.2.2 Urban Water Use Objective

New water use efficiency standards from the “Making Conservation a California Way of life Regulation” (CWOL Regulation) supersede SBX7-7 standards. In 2018, two policy bills were enacted by the California Legislature, Assembly Bill 1668 (Friedman, 2018), and Senate Bill 606 (Hertzberg, 2018), collectively referred to as the “2018 Water Conservation Legislation.” Based on the 2018 Water Conservation Legislation, related legislation, and subsequent adoption of the CWOL Regulation, each urban retail water supplier must comply with its UWUO. The UWUO is the sum of standards for indoor residential water; outdoor residential water use; commercial, industrial, and institutional (CII) landscape areas irrigated with dedicated meters; water losses; variances (if applicable); and bonus incentives for potable reuse (if applicable). DWR and the State Water Resources Control Board have developed a reporting framework for calculating the UWUO and compliance annually with efficiency standards becoming increasingly stringent

through 2040. This UWMP projects demand to plan for supply reliability if demands continue in alignment with historic patterns, but the city separately estimates its UWUO to plan and implement demand management measures (described in Section 9) to support meeting the UWUO. Demand management measures and UWUO compliance planning enhance resiliency for drought and other water shortage conditions as described in Sections 7, 8, and 9.

4.3 Water Use for Lower Income Households

CWC Section 10631.1 requires demand projections to include projected water use for single-family and multi-family residential housing needed for lower-income households. Lower-income households are defined as households making less than 80% of area mean income, adjusted for family size.

Approximately 16% of existing households in the city (2,170 out of 13,400 total) qualify as lower income households in the latest Comprehensive Housing Affordability Strategy data based on 2018-2022 American Community Survey data (U.S. Department of Housing and Urban Development, 2025).

SCAG allocated RHNA New Construction objectives of 774 units to Manhattan Beach for the 6th Cycle (2021-2029) planning period. These objectives were divided according to the following income distribution:

- Extremely Low/Very Low Income: 322 units
- Low Income: 165 units
- Moderate Income: 155 units
- Above Moderate Income: 132 units

Lower income new construction objectives total 487 units, or 63% of the total objective. If new construction targets are achieved in alignment with the planned distribution, an estimated 19% of total housing units would qualify as lower-income if income distributions remain constant. Lower-income residential water demand was assumed to be 16% of existing residential demand and 19% of projected future residential demand, as summarized in Table 4-5.

Table 4-5: Lower-Income Demand Projection (AFY)

Residential Demand	2025	2030	2035	2040	2045	2050
Lower-Income	521	631	653	674	671	668
Other	2,696	2,737	2,830	2,923	2,910	2,897
Total	**3,217**	**3,369**	**3,483**	**3,597**	**3,581**	**3,565**

4.4 Climate Change Considerations

Climate change is of special concern for water resource management because of the range of potential scenarios and their potential impact on water supplies and demands. Precipitation and temperature primarily influence water demand for landscape irrigation and other outdoor water uses. Generally, when the weather is hotter and dryer, water use increases if all other things remain constant. During cooler, wetter periods, water use generally decreases due to reduced outdoor water needs.

Analysis from California's Fourth Climate Change Assessment, using the Cal-Adapt tool, projects an increase in average annual maximum temperature in the city by mid-century of approximately 2.9 to 3.6 degrees Fahrenheit (Cal-Adapt, 2018). Under hotter and drier conditions, water needed for outdoor irrigation will need to increase to maintain healthy plants, evaporative losses will increase, and water use for commercial and industrial cooling is expected to rise. The potential impact on projected future demand was considered in the assumptions and scenarios evaluated in Section 4.2.

The potential for ongoing changes to the local climate and the resulting impacts on supplies are further discussed in Chapter 6. Planning for potential water shortages is discussed in the WSCP in Appendix C.

5 SB X7-7 Baselines, Targets, and 2025 Compliance

This section provides a brief overview of the Water Conservation Act of 2009 (Senate Bill X7-7) and demonstrates Manhattan Beach's compliance with the 20% reduction by 2020 target.

IN THIS SECTION

- SBX7-7 Forms and Tables
- 2020 Compliance

Senate Bill 7 of Special Extended Session 7 (SBX7-7) was incorporated into the UWMP Act in 2009 and requires that all water suppliers increase water use efficiency with the overall goal to decrease per-capita water consumption within the state by 20 percent by the year 2020.

SBX7-7 required DWR to develop certain criteria, methods, and standard reporting forms through a public process that water suppliers could use to establish their baseline water use and determine their water conservation targets. SBX7-7 and DWR's Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (DWR, 2016) specify methodologies for determining the baseline water demand, 2015 interim urban water use target and the 2020 urban water use target as described in the 2020 UWMP. This section also demonstrates that the city achieved its 2020 water use target.

The city's per-capita water use during CY 2020 was 124 GPCD. The city's 2020 Water Use Target was 144 GPCD. The city's per-capita water use during CY 2020 meets the 2020 Water Use Target and is in compliance, as shown in Table 5-1.

Table 5-1: SB X7-7 2020 Target Progress

2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?
144	124	Yes

6 Water Supply Characterization

This section describes and quantifies Manhattan Beach's current and projected potable and non-potable water supplies. It provides a narrative description of each supply source and quantifies the supply availability for each supply source identified.

IN THIS SECTION

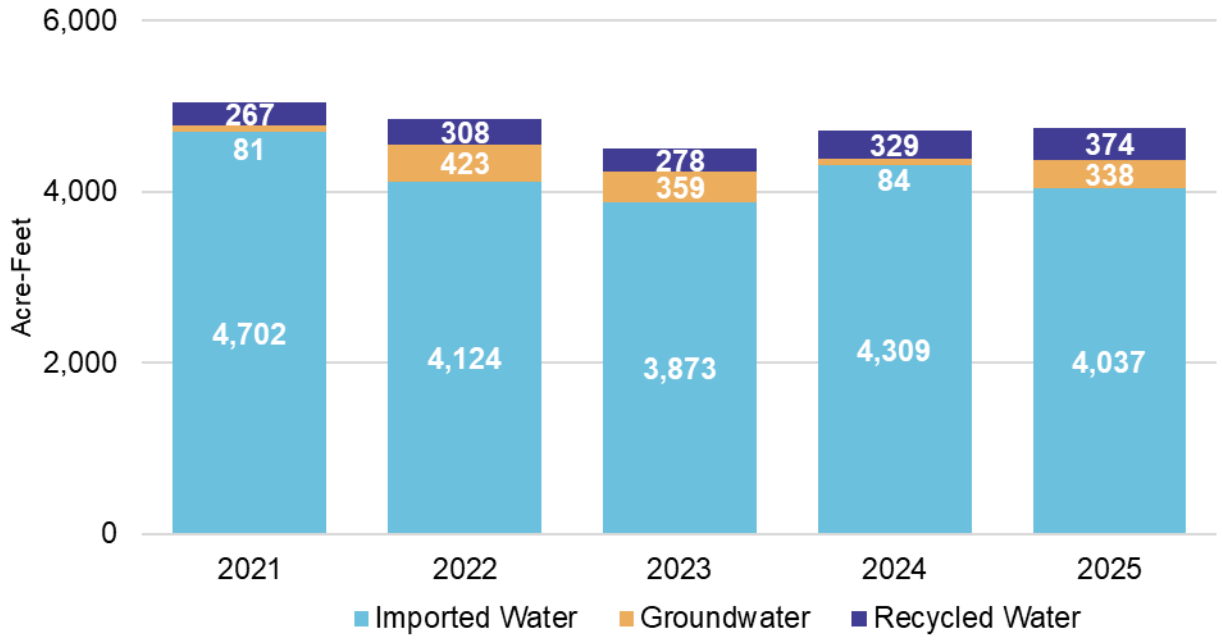
- Water Supply Overview
- Water Supply Characterization
- Energy Intensity

6.1 Water Supply Overview

This section describes the current and projected water resources available to the city over the 25-year planning period. The city currently uses potable and non-potable water to meet the demands of its water service area. Potable water sources include both local groundwater from the West Coast Basin and imported water. Groundwater is produced via city-owned and operated wells. Imported water is purchased by the city from WBMWD, which receives imported supply from MWD. Non-potable water supply is produced by WBMWD at the Edward C. Little Water Recycling Facility (ECLWRF).

The city's groundwater production in recent years has been impacted by water quality issues, requiring the city to increase purchases of imported water. Recycled water supply has remained relatively consistent. Manhattan Beach's actual water supply over the past five years is summarized in Figure 6-1.

Figure 6-1: Manhattan Beach Water Supply, 2021-2025



6.2 Water Supply Characterization

6.2.1 Imported Water

Manhattan Beach receives imported water supplies from WBMWD. WBMWD is a wholesale water agency in southwestern Los Angeles County that provides imported drinking water to 9 agencies spanning 17 cities and unincorporated areas of Los Angeles County throughout its 185-square-mile service area. The city maintains a 15-cubic-foot-per-second connection with WBMWD to receive treated imported water.

WBMWD receives imported water supplies through MWD, which receives its imported water supplies from the Colorado River and the SWP. MWD also manages a vast network of infrastructure designed to provide water to its 26 member agencies in Southern California. This section describes imported water supplies based on the Draft MWD 2025 UWMP (MWD, 2026) and the Draft WBMWD 2025 UWMP

6.2.1.1 Imported Water Supplies

MWD receives its imported water supplies from the Colorado River and the SWP.

Colorado River Supplies

The Colorado River was MWD's original source of water following its establishment in 1928. MWD has a legal entitlement to receive water from the Colorado River under a permanent service contract with the United States Secretary of the Interior.

Created in 1928, MWD's founding mission was to build and operate the Colorado River Aqueduct. MWD helped forge landmark federal agreements like the Boulder Canyon Project Act, which divided up the Colorado River water supply and led to the creation of Hoover Dam. MWD began diverting Colorado River water in 1939, through the Colorado River Aqueduct, and delivering water to the Los Angeles region in 1941. The Colorado River is governed by the "Law of the River," a complex collection of compacts, treaties, laws, court decisions, and contracts which governs water allocations and operations among seven western states, native American tribes, and Mexico.

With a capacity of 1.25 million AFY, the Colorado River Aqueduct transports water from Lake Havasu, at the border of California and Arizona, approximately 242 miles west to its terminus at Lake Mathews in Riverside County and MWD's service area. The Colorado River Aqueduct and its California water users are shown in Figure 6-2.

Over the years, MWD has increased supply reliability of the Colorado River through programs that it helped fund and implement, including:

- Farm and irrigation district conservation programs
- Improved reservoir system operations
- Land management programs
- Storage programs
- Invasive species control programs
- Water transfers and exchanges through arrangements with:
    - Agricultural water districts in southern California
    - Entities in Arizona and Nevada that use Colorado River water
    - US Department of the Interior, Bureau of Reclamation (USBR)

Figure 6-2: Colorado River Aqueduct

Source: MWD 2025 UWMP (MWD, 2026)

State Water Project Supplies

When the SWP was constructed in the 1960s and 1970s, MWD became the largest of the system's statewide contractors. SWP is a multi-purpose water storage and delivery system that extends more than 700 miles, two-thirds the length of California, and transports Feather River water stored in and released from Oroville Dam and conveyed through the Bay-Delta, as well as unregulated flows diverted directly from the Bay-Delta, south via the California Aqueduct to four delivery points, which include one from the California Aqueduct's West Branch at Castaic Lake and three from the East Branch along the northeastern portion of MWD's service area between Devil's Canyon Power Plant and Lake Perris. The southern portion of the SWP is shown in Figure 6-3. SWP supplies fluctuate based on snowpack and precipitation in the Northern Sierras and are subject to constraints designed to protect fish species and water quality in the Delta.

Figure 6-3: State Water Project

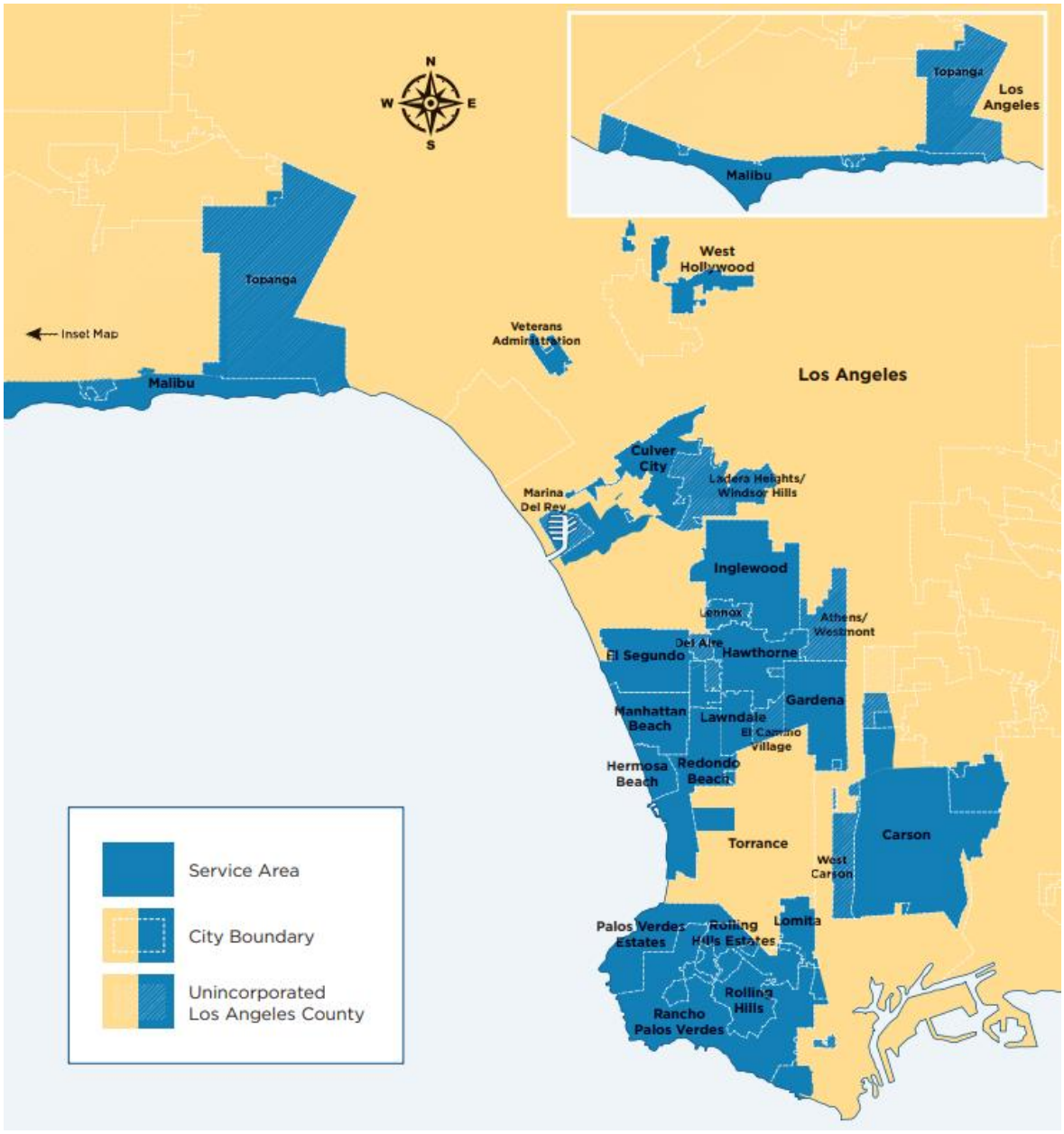
Source: MWD 2025 UWMP (MWD, 2026)

In 1960, MWD signed a water supply contract with DWR for participation in the SWP. MWD is one of 29 agencies that have long-term contracts with DWR and are participants in the SWP. It is the largest SWP agency in terms of the number of people it serves, the share of SWP water that it is allocated (approximately 46%), and the percentage of total annual payments made to DWR (approximately 52% in 2025) (MWD, 2026).

MWD provides imported drinking water directly to WBMWD's nine customer agencies. The relationship between WBMWD and its customer agencies is shown in Figure 6-4. WBMWD's service area is shown in Figure 6-5, and the cities and communities within their associated divisions are described below.

Figure 6-4: WBMWD Customer Agencies

Figure 6-5: WBMWD Municipal Water District Service Area



6.2.1.2 Supply Capabilities

The MWD 2025 UWMP reports on MWD's water reliability and identifies projected supplies to meet the long-term demand within its service area. For the MWD 2025 UWMP, supply capabilities were evaluated using the following assumptions for its imported supplies.

Colorado River Supplies

Colorado River supplies include MWD's basic Colorado River apportionment as well as supplies that result from existing and committed programs, including those from the Imperial Irrigation District System Conservation Program, the implementation of the Quantification Settlement

Agreement, related agreements, the Palo Verde Irrigation District Land Management Program, the Crop Rotation Program, the Water Supply Program, the Lower Colorado River Water Supply Projection, and the exchange agreement with San Diego County Water Authority.

In response to declining reservoir levels, the Lower Basin Drought Contingency Plan was signed in 2019. This agreement incentivizes storage in Lake Mead and requires that certain volumes of water be stored in Lake Mead under certain Lake Mead elevation levels through 2026. Once Lake Mead's water level falls below an elevation of 1,045 feet, MWD has agreed to store a specified volume of water in Lake Mead to create an intentional surplus for drought conditions as part of the Drought Contingency Plan. The goal of this agreement is to keep Lake Mead above critical elevations, and overall, it increases MWD's flexibility to store water in Lake Mead in greater volumes and to accept delivery of stored water to fill the Colorado River Aqueduct as needed.

At the time of this report, negotiations over the successor post-2026 guidelines are ongoing, and the outcome is highly uncertain. However, it is anticipated that California will likely be required to reduce its supplies from the Colorado River, on average, under the new guidelines, and that as the junior priority, MWD is at risk.

Projections for Colorado River supplies for the 2025 UWMP are based on the USBR Colorado River Simulation System modeling developed in August 2023, which is the latest available at the time of production of this plan. USBR modeling is used to estimate MWD's basic apportionment and the availability of Quantification Settlement Agreement and other related programs.

State Water Project Supplies

SWP supplies are estimated using the 2025 Draft SWP Delivery Capability Report (DWR, 2025).The 2025 Draft SWP Delivery Capability Report presents DWR estimates of the amount of SWP deliveries for current (2025) conditions and SWP deliveries for 20 years in the future considering only currently operating and existing SWP facilities. Any changes in supply reliability that would result from new facilities proposed under the Delta Conveyance Project and Sites Reservoir are not included. These estimates incorporate restrictions on SWP and Central Valley Project operations in accordance with water quality objectives established by the State Board, the biological opinions of the US Fish and Wildlife Service and National Marine Fisheries Service issued on November 8, 2024, biological opinions of the National Marine Fisheries Services issued on December 6, 2024, and the Incidental Take Permit issued by the California Department of Fish and Wildlife on November 4, 2024. In addition, these estimates incorporate amendments to the Coordinated Operations Agreement between the SWP and Central Valley Project made in 2018. Under the 2025 SWP Delivery Capability Report - Existing Condition Scenario, the delivery estimates for the SWP for 2025 conditions as a percentage of Table A amounts are 54% under a long-term average condition.

In dry, below-normal conditions, MWD has increased the supplies received from the California Aqueduct by developing flexible Central Valley/SWP storage and transfer programs. Over the years, under the pumping restrictions of the SWP, MWD has collaborated with the other contractors to develop numerous voluntary Central Valley/SWP storage and transfer programs.

The goal of these storage/transfer programs is to develop additional dry-year supplies that can be conveyed through the California Aqueduct during dry hydrologic conditions and to meet regulatory restrictions.

The State Board is currently in the process of updating the Bay-Delta Plan focused on the Sacramento River and its tributaries, Delta eastside tributaries (including the Calaveras, Cosumnes, and Mokelumne Rivers), interior Delta flows, and Delta outflows, including consideration of proposed voluntary agreements or the Healthy Rivers and Landscapes approach. Healthy Rivers and Landscapes is an alternative approach to what otherwise would be a mandated regulatory pathway based largely on unimpaired flow requirements.

There are two major efforts to increase SWP supply capabilities undertaken by the Sites Project Authority and the Delta Conveyance Design and Construction Authority as described below:

- **Sites Reservoir Project:** The proposed Sites Reservoir Project would be a 1.5 million acre-foot off stream surface storage reservoir located in the Sacramento Valley west of the town of Maxwell, North of the Delta. Sites Reservoir is designed to capture and store water during wet periods, ensuring flexibility, reliability, and resiliency during dry years. Operation of the proposed reservoir would be in cooperation with the operations of existing Central Valley Project (CVP) and SWP system facilities. In January 2026, the Sites Project Authority stated that based on actual river flows, recent analysis found Sites could have diverted 1.35 million acre-feet during the 2024-2025 Water Year. In January 2026, Sites Project Authority announced that recent federal funding commitments had increased total federal funding to $646.15 million. In addition, Sites received State funding commitments of $875 million through the Prop 1 Water Storage Investment Program. In March 2026, the State Water Resources Control Board released a draft decision and conditional approval for a water right permit which will provide legal authority to divert water within certain conditions, for a specific purpose, and for use within a specified area.
- **Delta Conveyance Project:** The proposed Delta Conveyance Project (DCP) will modernize the SWP by making physical improvements to how the State captures and moves water during wet years for use in dry years with a single tunnel system. The DCP is intended to restore the reliability of the SWP and ensure California's largest supply of clean and affordable water for 27 million people and what would be the 8th largest economy in the world in Southern California. In 2024, An updated cost estimate was prepared by the Delta Conveyance Design and Construction Authority (DCA), using a detailed and rigorous approach, finding that the benefits outweigh the costs and every dollar spent generates $2.20 in benefits. For Water Year 2024-2025, DWR estimates that if the DCP was operational, 956,000 acre-feet of water could have been captured and moved. The DCP includes extensive public engagement and includes a community benefits program, tribal engagement, and environmental review.

Since this UWMP uses DWR's 2025 SWP Delivery Capability Report to estimate future SWP supplies, any changes in supply reliability that would result from new facilities proposed under

the proposed Delta Conveyance Project and Sites Reservoir are not included in the following tables. The study showed that if no action is taken that the combined effects of subsidence and climate change could reduce deliveries by 23% by 2043.

Storage

A key component of MWD's water supply capability is the amount of water in MWD's storage facilities. Over the past two decades, MWD has developed a large regional storage portfolio that includes both dry-year and emergency storage capacity. Storage is a key component of water management and enables the capture of surplus amounts of water in both normal and wet climate and hydrologic conditions when it is plentiful for supply and environmental uses. Stored water can then be used in dry years and in conditions where augmented water supplies are needed to meet demands.

In developing the supply capabilities for the 2025 UWMP, MWD assumed the current (2025) storage levels at the start of simulation and used the median storage levels going into each of the five-year increments based on the balances of supplies and demands. Under the median storage condition, there is an estimated 50% probability that storage levels would be higher than the assumption used, and a 50% probability that storage levels would be lower than the assumption used. All storage capability figures shown in MWD's 2025 UWMP reflect actual storage program conveyance constraints. It is important to note that under some conditions, MWD may choose to implement its Water Supply Allocation Plan to preserve storage reserves for a future year instead of using the full supply capability. This can result in impacts at the retail level even under conditions where there may be adequate supply capabilities to meet demands.

Regional Conveyance

The 2025 Seismic Resilience Report provides an overview of MWD's current seismic resilience strategy and the infrastructure improvements made to mitigate potential impacts to facilities and systems from earthquake hazards (MWD, 2025).

Under the Planning component, water supply diversification and improved system flexibility continue to be the primary goals for increased resilience. The Diamond Valley Lake to Rialto Pipeline Project and Sepulveda Feeder Pump Project will improve MWD's ability to move Colorado River or stored water within Diamond Valley Lake to member agency service areas that are highly dependent on State Water project supplies improving both drought and seismic resilience for these areas.

The Sepulveda Feeder Pumping Project will construct two pump stations along the Sepulveda Feeder to enable delivery of treated Colorado River or stored SWP supplies to member agencies in MWD's western service area that are highly dependent on SWP supplies from the California Aqueduct West Branch. This project enhances supply reliability in the western service area and increases overall system flexibility. Many of WBMWD's retail agencies receive water directly, or partially, from the Sepulveda Feeder.

6.2.1.3 Imported Water Reliability

Historically, imported supplies have been generally reliable. Since 1991, MWD has made significant investments in conservation, water recycling, storage, and improved supplies. Groundwater storage programs with Semitropic Water Storage District and Arvin-Edison Water Storage District increase MWD's out-of-region storage capacity of state water project water by 600,000 AF. Additional groundwater storage programs have been established with the San Bernardino Valley Municipal Water District and Kern-Delta Water District that will expand that capacity further. The completion of Diamond Valley Reservoir has added 800,000 AF of supply to southern California's mix of resources available to meet dry year needs. MWD has historically been a strong proponent of alternative Delta conveyance, investing in the planning and design of the Delta Conveyance Project to facilitate the implementation of the long-discussed tunnel to increase reliability of SWP supplies.

Despite these investments, there have been recent imported water shortages due to increased drought frequency. In 2015, during the 2012 to 2016 drought, MWD enacted its Water Supply Allocation Plan (WSAP) issuing a reduction in imported water allocations to WBMWD and its retailers. The WSAP provides a means of equitably providing reduced water supplies to each of MWD's member agencies for up to 10 levels of reduction representing up to a 50 percent reduction.

The WSAP establishes ten different shortage levels and a corresponding Allocation to each member agency. Based on the shortage levels established by MWD, the WSAP provides a separate reduced Allocation to a member agency for its 1) Municipal and Industrial retail demand and 2) replenishment demand. The WSAP formula considers historical local water production, full service treated water deliveries, agricultural deliveries and water conservation efforts when calculating each member agency's Allocation.

In general, the WSAP process calculates total historical member agency demand. That historical demand is then compared to member agency projected local supply for a specific Allocation year. The balance required from MWD, less an Allocation reduction factor, is the member agency's "Water Supply Allocation" of imported water from MWD.

When a member agency reduces its local demand through conservation or other means, the allocation of imported water will increase. Depending on MWD's available supply, MWD can establish a specific WSAP shortage level. The shortage level causes a regional reduction and calculates an allocation for each of its member agency. Additional information about MWD's WSAP is provided in MWD's 2025 UWMP, which is incorporated by reference.

In response to a fourth consecutive year of below average rainfall and critically dry conditions, MWD declared a WSAP Allocation Level 3 for fiscal year 2015-16, which represented a regional reduction of 15 percent. MWD rescinded the WSAP for fiscal year 2016-17 and has not reinstated the WSAP since that time.

In response to the continued drought conditions, MWD's Board of Directors declared a Water Supply Alert in August 2021, calling for consumers and businesses to voluntarily reduce their

water use and help preserve the region's storage reserves. This declaration comes a day after the United States Bureau of Reclamation declared a first-ever shortage on the Colorado River. A Water Supply Alert is the third of four escalating conditions in MWD's framework indicating the urgency of Southern California's need to save water. The action calls for water agencies to reduce their water demand through public awareness campaigns and by adopting local measures including increased outdoor water use efficiency, prohibiting home car washing or filling of ornamental water features, and requiring that restaurants only serve water upon request. MWD's declaration seeks to avoid the need for more severe actions, including moving to the fourth and final stage in MWD's framework (i.e., WSAP). In addition, while shortages in the Colorado River can potentially impact water supplies, MWD owns priority rights to the Colorado River and water supply will not be impacted in the immediate future. MWD has indicated that its supplies from the Colorado river will not be impacted in 2022 and may be impacted in 2023 and more likely in 2024, if the drought continues, which could potentially trigger the WSAP through which MWD would implement higher rates for increased use among its member agencies.

Considering this, MWD estimates imported water supply reliability for its Member Agencies, including WBMWD, for use in their 2025 UWMPs. MWD has undertaken several planning initiatives over the years to provide a policy framework, operating guidelines, and resource targets for MWD to ensure regional water supply reliability. MWD's regional supply planning is typically completed through their Integrated Resources Planning (IRP) process. The IRP is MWD's long-term, comprehensive water resources planning strategy to assess reliability for the region by considering overall demands for the MWD service area relative to local supplies and imported water availability. The IRP analyzes a wide range of uncertainties through scenario planning and ranges in future supply and demand within its service area.

MWD's long-term water service reliability assessment performed for their UWMP shows that, under the UWMP planning assumptions, there would be sufficient supply and storage capabilities to meet projected demands from 2030-2050 (MWD, 2026). However, MWD acknowledges that their 2025 UWMP includes a single outcome approach and UWMP projections do not include the wider range of planning assumptions considered in their other planning documents, such as the 2020 IRP.

Building on MWD's findings, WBMWD's water service reliability assessment performed for their UWMP also shows that, under UWMP planning assumptions, there would be sufficient supply capabilities to meet projected demands from 2030-2050 (WSC, 2026).

6.2.1.4 Imported Water Quality

MWD's 2025 UWMP considered water quality concerns for imported water supplies as well as local supplies, such as groundwater. While drought conditions and reduced SWP allocations have temporarily increased reliance on higher-salinity Colorado River water, MWD mitigates these impacts through blending and treatment upgrades. Based on the 2025 UWMP, MWD does not anticipate any significant reductions in imported water supply availability due to water quality concerns (MWD, 2026).

6.2.2 Groundwater

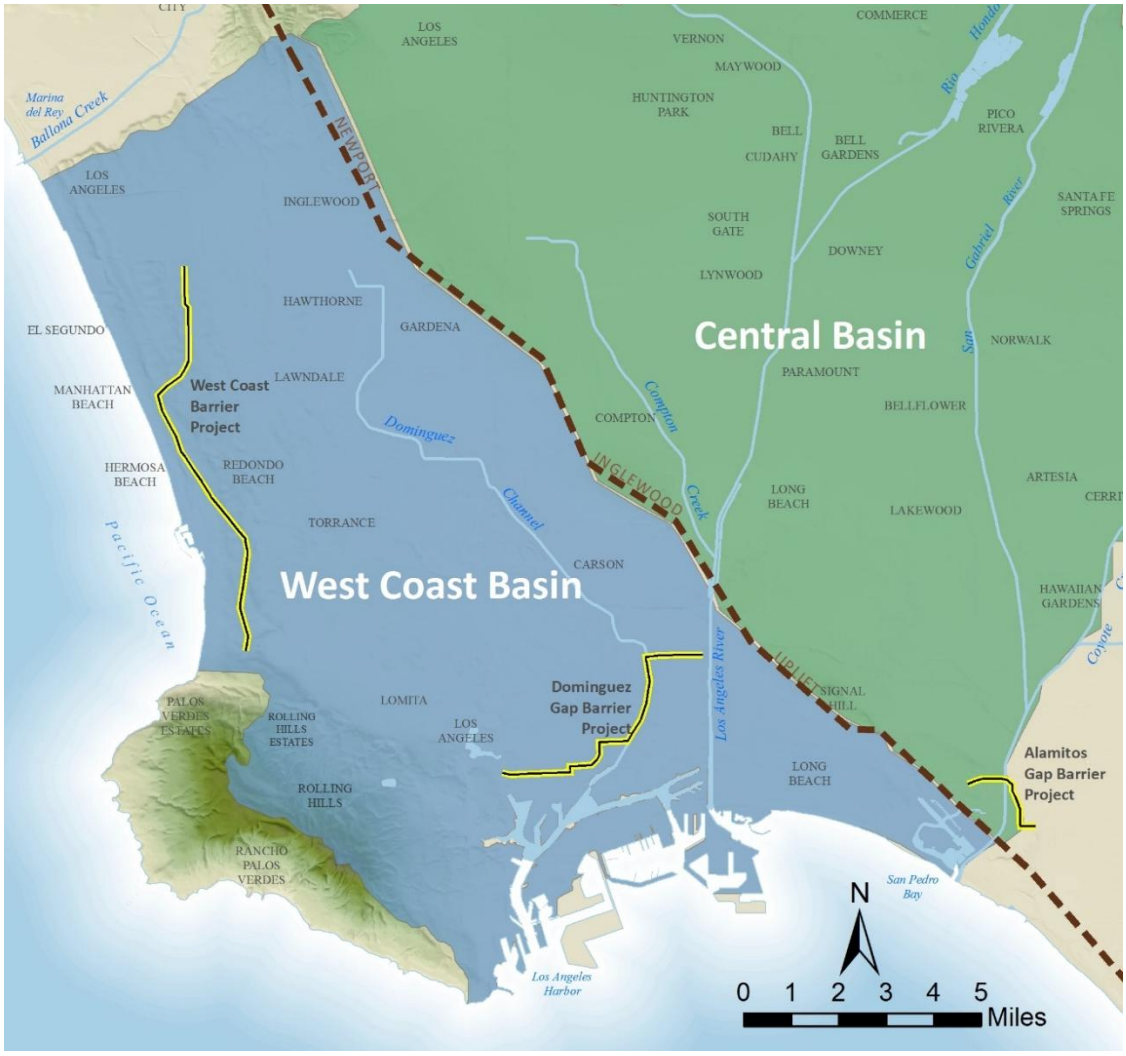
6.2.2.1 Groundwater Supplies

The city pumps groundwater from the West Coast Groundwater Basin. The West Coast Groundwater Basin is a subbasin of the Coastal Plain of Los Angeles County Groundwater Basin, as defined in DWR Bulletin 118 (Basin No. 4-11.03). The basin underlies approximately 160 square miles of the southwestern Los Angeles Coastal Plain and is bounded by the Ballona Escarpment to the north, the Newport–Inglewood fault zone to the east, the Pacific Ocean to the west, and the Palos Verdes Hills and San Pedro Bay to the south. Major water-bearing formations include the Holocene alluvial aquifers, the Gage aquifer of the Lakewood Formation, and the Silverado aquifer of the San Pedro Formation, which supplies approximately 80 to 90 percent of groundwater production and provides an estimated 6.5 million acre-feet of total storage. Regional groundwater flows generally southward and westward toward the coast.

Groundwater conditions in the West Coast Groundwater Basin were historically impacted by overdraft and seawater intrusion resulting from heavy pumping during the early to mid-20th century. In response, the basin was adjudicated by the Los Angeles County Superior Court, culminating in a final Judgment in 1961 and a supplemental Judgment in 1966, which together limit total basin production to 64,468.25 acre-feet per year. The Judgment establishes quantified pumping rights for individual parties, allows limited carryover of unused rights, and provides mechanisms for water exchanges, transfers, and emergency pumping under defined conditions. In 2014, the Court approved amendments to the Judgment that modernized basin governance, established adjudicated groundwater storage programs, and transferred Watermaster administrative responsibilities to the WRD. The Judgment also allows water users to carry over and extract any unused water rights, which originally was up to 10% of such unused water right and up to 10% beyond their allowable pumping rights within a given year. As an adjudicated basin, the West Coast Groundwater Basin is exempt from the requirements of the Sustainable Groundwater Management Act. A copy of the West Coast Basin Amended Judgment is available electronically at https://rights.wrd.org/about/judgment_west_coast.

Natural recharge to the West Coast Groundwater Basin is limited and occurs primarily through subsurface inflow from the Central Basin and minor infiltration of stormwater and applied irrigation water. To prevent seawater intrusion and manage ongoing overdraft conditions, WRD operates extensive artificial recharge programs, including the West Coast Basin Seawater Barrier and the Dominguez Gap Barrier, which inject imported and recycled water to maintain protective freshwater gradients along the coastline. WRD also administers in-lieu replenishment and adjudicated storage programs to enhance regional water supply reliability. A map of the West Coast Groundwater Basin including the barrier locations is shown in Figure 6-6.

Figure 6-6: West Coast Groundwater Basin Map



The city produces groundwater from the West Coast Groundwater Basin from two wells (Well 11A and Well 15). The city's current adjudicated right is 1,130.20 AFY. The city has recently constructed a treatment facility to remove manganese contamination, which had impacted production from Wells 11A and 15 and had also required the city to increase purchases of imported water in recent years.

6.2.2.2 Groundwater Reliability

Groundwater is a highly reliable supply because it is not immediately susceptible to changes in climate and surface flows. The Los Angeles County Department of Public Works owns and maintains the seawater barrier system and determines how much barrier injection water is required to protect the aquifer from seawater intrusion. WRD determines how much additional water is needed to replenish the West Coast Groundwater Basin to support pumping beyond the injection water needed for seawater intrusion protection.

In past years, when groundwater pumping exceeded recharge and replenishment, seawater intruded into the West Coast Groundwater Basin. Once the intrusion barrier projects were brought on-line, further intrusion was stopped, however a large plume of saline water has remained trapped within the West Coast Groundwater Basin. The groundwater supply projections have already considered the presence of the plume and therefore anticipate no change in supply reliability as a result of its existence. Overall, the current groundwater quality in the West Coast Groundwater Basin remains very good, with only some areas facing poor water quality from natural or anthropogenic sources that WRD continues to monitor closely to determine increasing or decreasing trends (WRD, 2024).

The West Coast Basin Adjudication allows Parties to the Judgment to pump up to 20 percent more of its annual Allowed Pumping Allocation plus any carry-over water rights. In addition, the West Coast Basin Judgment includes an amendment which implemented a water storage program. A party may store up to 50 percent of the party's Allowed Pumping Allocation in an Individual Storage Account and 150 percent of the party's Allowed Pumping Allocation in a Community Storage Account if space is available. The amendments also allow parties to convert unused Allowed Pumping Allocation to stored water and revised the amount of carryover to be equal to 60 percent of the party's Allowed Pumping Allocation minus the amount of carryover water set aside for storage. The purpose of the storage program creates an added reliability in water supply from the West Coast Basin.

6.2.2.3 Groundwater Quality

WRD maintains monitoring wells throughout the West Coast Groundwater Basin. These wells allow water quality and groundwater levels to be evaluated on an aquifer-specific basis. Regional Groundwater Monitoring Reports are published by WRD for each water year. In general, groundwater is of good quality and suitable for use by the city. Groundwater from localized areas within the basin with marginal to poor water quality can still be utilized but may require treatment prior to being used as a potable source.

Manganese concentrations in excess of desirable levels have required the city to blend groundwater with imported water, reducing groundwater production and increasing reliance on imported water in recent years. The city has recently completed the Peck Reservoir Replacement Project to replace an ageing eight-million-gallon drinking water storage reservoir. The second largest capital improvement project in recent history included a local groundwater filtration treatment facility – including yard piping, valve vaults, tank assemblies, operational control and chemical disinfection storage buildings, main electrical room, ground-level power transformer, emergency back-up generator, and stormwater runoff containment dry wells. The groundwater treatment plant underwent startup and commissioning in 2024 and water production was permitted by the State in 2025.

The city is currently investing in the rehabilitation of its groundwater wells to further increase local groundwater production capacity and strengthen its local drinking water supply reliability. The city's adjudicated groundwater pumping rights of 1,131 acre-feet per year (AFY) are capable of supplying approximately 25 percent of the community's annual drinking water needs.

One groundwater well is currently undergoing rehabilitation, and the second well is anticipated to undergo rehabilitation during Fiscal Year 2026–2027. During this period, the city will continue blending local groundwater supplies with imported water, which is expected to remain necessary for the foreseeable future. The city is expected to achieve full utilization of its adjudicated groundwater rights during Fiscal Year 2027–2028.

6.2.3 Surface Water

The city does not use surface water supplies to meet its water demands.

6.2.4 Stormwater

The city does not directly use stormwater to meet its water demands.

6.2.5 Wastewater and Recycled Water

6.2.5.1 Wastewater Collection, Treatment, and Disposal

The city's existing wastewater collection system consists of approximately 81.6 miles of pipe and 2,086 manholes and cleanouts. The system also includes eight pump stations and 5,114 feet of associated force mains. The city's wastewater system is primarily constructed of vitrified clay pipe with sizes ranging from 6-inches to 21-inches in diameter. Approximately 78 percent of the pipes are 8-inches in diameter. Most of the city's wastewater system was constructed between 1920 and 1960.

The city's local sewers tie into one of the Los Angeles County Sanitation District (LACSD) regional trunk sewers crossing through the city. There are two primary LACSD trunk sewers within the city. The first trunk runs northwest to southeast and parallels The Strand along the beachfront. The second trunk runs west to east and is located in 26th Place, Bell Avenue, 25th Street and Marine Avenue. Pacific Avenue Pump Station, Palm Avenue Pump Station, Poinsettia Avenue Pump Station, Meadows Avenue Pump Station, and Voorhees Avenue Pump Station are tributary to this trunk sewer.

Wastewater generated within the city is conveyed to the A.K. Warren Water Resource Facility (AKWWRF), formerly the Joint Water Pollution Control Plant in Carson, via LACSD interceptor sewers. The AKWWRF is operated by LACSD and provides service to about 3.5 million people with the region, with a maximum design peak flow of 540 million gallons per day (MGD) and an average flow of 280 MGD. The city is a part of LACSD's South Bay Cities District.

Neither LACSD nor the city meter total wastewater flows. However, the quantities of wastewater generated are proportional to the population and the water uses in the city's water service area and have been estimated using available data. Estimated wastewater flows were calculated using category types in the city's Urban Water Use Objective reporting and were estimated to be approximately 65% percent of the total water demand, or 3,086 AF in 2025.

Treated wastewater from the AKWWRF is discharged through two outfalls into the Pacific Ocean located about two miles offshore from White Point on the Palos Verdes Peninsula. The

depth of the discharge point is approximately 200 feet below sea level. The AKWWRF system includes advanced primary treatment with 60 percent secondary treatment. Because all wastewater treated at the AKWWRF is currently discharged to the ocean, none of the city's wastewater is treated to recycled water standards.

6.2.5.2 Recycled Water

Since 1995, Manhattan Beach has purchased recycled water from WBMWD. WBMWD's recycled water supply source is treated wastewater effluent from the City of Los Angeles' Hyperion WRP. The City of Los Angeles has operated Hyperion WRP, located adjacent to WBMWD's service area, since 1894. Hyperion WRP was initially built as a raw sewage discharge plant that has been upgraded over the years from partial secondary treatment in 1950 to full secondary treatment in the 1990s, improving treated wastewater discharge quality into Santa Monica Bay. Hyperion WRP has a maximum daily flow capacity of 450 MGD and a peak wet weather flow capacity of 800 MGD.

Over the past five years, WBMWD has received an average of approximately 33,350 acre-feet per year of secondary-treated influent from Hyperion WRP for further treatment at WBMWD's ECLWRF. All other flows through Hyperion are treated and discharged into the Pacific Ocean; however, the City of Los Angeles Sanitation and Environment department has partnered with the Los Angeles Department of Water and Power in a shared vision to recycle 100% of flows through Hyperion WRP.

WBMWD opened the Edward C. Little Water Recycling Facility (ECLWRF) in 1995. This facility has a current annual capacity of 40 MGD. Although the city of Los Angeles strives to provide WBMWD with a consistent quality of secondary effluent, the ECLWRF must accommodate inevitable fluctuations in influent quality.

In 2002, WBMWD's ECLWRF was recognized by the National Water Research Institute as one of six National Centers for Water Treatment Technologies in the country. All of WBMWD's recycled water is treated to meet California Code of Regulations Title 22 disinfected tertiary recycled water standards, and a portion is treated to even higher quality levels for specific uses. Title 22 addresses specific treatment requirements for recycled water and lists approved uses. WBMWD's recycled water program is unique in that it provides a variety of recycled water qualities beyond Title 22 requirements.

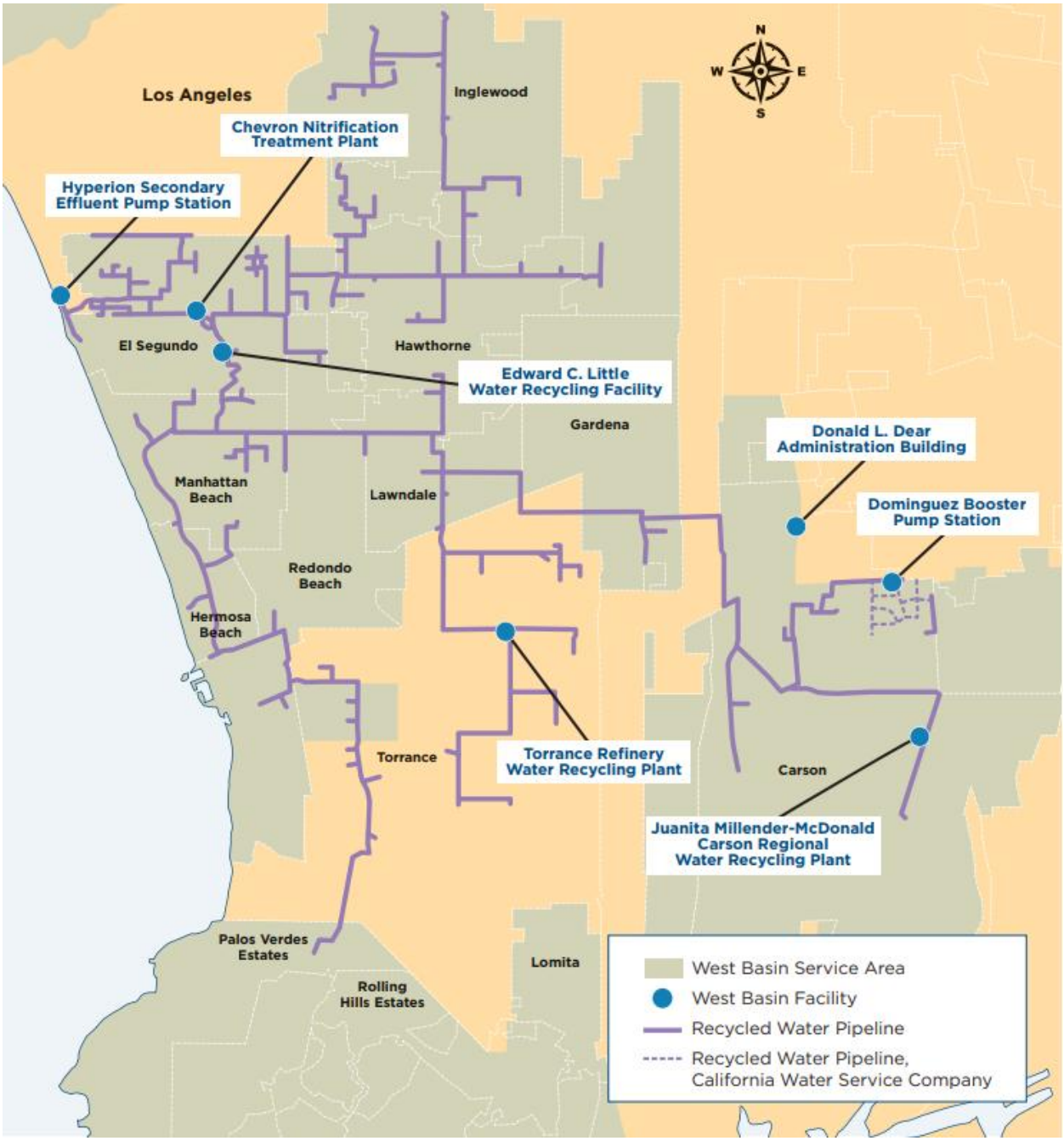
In addition to providing recycled water for landscape, commercial, and industrial uses, WBMWD produces advanced treated recycled water that WRD purchases for injection into the West Coast Basin Seawater Barrier. The groundwater replenishment water has the dual benefit of preventing seawater intrusion into the aquifers of the West Coast Basin and replenishing the water that is extracted by drinking water wells.

All recycled water is initially produced at ECLWRF as Title 22 water or advanced treated recycled water and is distributed to either end users or one of the three satellite facilities operated by WBMWD. The satellite facilities treat the Title 22 water produced at the ECLWRF to customer-specific water needs (nitrified, single-pass reverse osmosis, double-pass reverse

osmosis) to supply the different types of recycled product water to large customers that are often a longer distance from the ECLWRF.

Figure 6-7 shows the existing recycled water pipelines and locations of the ECLWRF (in El Segundo) as well as the satellite treatment facilities: the Torrance Refinery Water Recycling Plant (in Torrance), the Chevron Nitrification Treatment Plant (in El Segundo), and the Juanita Millender- McDonald Carson Regional Water Recycling Plant (in Carson). As shown, WBMWD's recycled water system serves the cities of Carson, El Segundo, Gardena, Hawthorne, Hermosa Beach, Inglewood, Lawndale, Manhattan Beach, Redondo Beach, and unincorporated areas of Los Angeles County within its service area. In addition, WBMWD delivers recycled water outside of its service area to the cities of Torrance and Los Angeles. The recycled water distribution infrastructure includes over 100 miles of pipelines and is separate from the potable drinking water system. All pipes, pumps, and other equipment used to transport recycled water are clearly identified as recycled water to distinguish them from the potable drinking water system.

Figure 6-7: WBMWD Recycled Water Distribution System



Recycled water is currently being used for irrigation of greenbelt areas, landscape, medians, parks, schools, and a golf course. Over the past 5 years, the city has purchased an average of approximately 311 AFY of recycled water from WBMWD. Table 6-1 reports the recycled water projections from the 2020 UWMP compared to the current and projected uses of recycled water within the city's service area.

Table 6-1: Recycled Water Direct Beneficial Uses Within Service Area (AFY)

Use Type	Water Type	2025 Projection (2020 UWMP)	2025 Actual	2030 (Projected)	2035 (Projected)	2040 (Projected)	2045 (Projected)	2050 (Projected)
Other	Non-Potable	275	374	374	374	374	374	374

6.2.5.3 Future Recycled Water Planning

As a member agency of WBMWD, the city supports the wholesaler's efforts to identify potential recycled water demands and to expand the recycled water distribution system where feasible. WBMWD actively generates interest in recycled water by engaging potential customers and cities with sites that are located near existing recycled water pipelines, have high water use potential, and are either mandated to use recycled water or have expressed interest in converting to recycled water supplies.

For commercial and industrial customers, WBMWD emphasizes that recycled water provides benefits beyond water conservation alone. Recycled water is promoted as a cost-effective supply that is generally less expensive than potable water treated to similar quality standards, offers greater reliability than imported water, and is consistent with statewide objectives to improve water supply resilience and reduce environmental impacts associated with the State Water Project and Colorado River systems. In addition to providing recycled water at a lower cost than potable water, WBMWD employs other financial incentives to encourage participation.

In some cases, potential recycled water customers lack the financial capacity to fund the on-site plumbing retrofits required to receive recycled water. Under these circumstances, WBMWD may advance funding for necessary retrofits, with costs later reimbursed through the customer's water billing arrangement.

In addition, WBMWD's service area is geographically located between two proposed large-scale advanced water treatment projects: Pure Water Southern California, and Pure Water Los Angeles. These projects, as proposed, have the potential to reshape recycled water use within the WBMWD service area, Southern California, and in the Southwest. WBMWD actively participates in discussions for both projects; however, ultimate decisions regarding the two projects are outside of WBMWD's control. WBMWD remains committed to exploring all options and partnership opportunities to develop and maintain a diverse and resilient water supply portfolio to meet the needs of WBMWD's communities and critical customers.

6.2.6 Desalinated Water

The city is not currently exploring the possibility of using desalinated water as a water source. However, as part of WBMWD's continued effort to diversify its sources of supply and improve the reliability of its customer agencies, the identification and planning for ocean water desalination was a logical and anticipated step in the diversification program. WBMWD began a

stepwise program to explore the systematic development of an environmentally responsible ocean water desalination facility in 2001. WBMWD's efforts exploring ocean desalination included a pilot study, demonstration facility, multiple technical studies, and the certification of the Environmental Impact Report for the Ocean Water Desalination Project.

In 2019, following certification of the Environmental Impact Report, the project entered an evaluation phase consistent with conditions established by the Board at that time. During this phase, WBMWD developed detailed financial estimates and analyses to inform subsequent decision-making. In August 2021, WBMWD released a cost-benefit analysis evaluating implementation of the project, including estimated costs, rate impacts, and affordability considerations. Based on the findings of the cost-benefit analysis, as well as the anticipated ability of MWD to meet WBMWD's demands under both normal and dry-year conditions, the WBMWD Board of Directors voted in December 2021 to terminate the proposed Ocean Water Desalination Project.

Emergent offshore desalination technologies are currently being tested. These technologies attempt to utilize the ocean's water pressure to push seawater through membranes and pump purified water back to shore. This technology is currently being tested in a drinking water reservoir.

6.2.7 Water Exchanges and Transfers

Manhattan Beach does not have any current or planned water exchanges. Pursuant to the West Coast Basin Judgment, parties to the Judgments are allowed to assign, transfer, license, or lease their water rights. The Judgment also allows for the transfer of stored water between parties. The city can utilize the transfer opportunities available for West Coast Groundwater Basin water when necessary.

The city maintains emergency interties (or interconnections) with adjacent water agencies. Two of the interconnections (with the city of El Segundo and California Water Service Co.) are equipped with two-way valves, which have the ability of providing water both to and from the city. An additional interconnection (with the city of El Segundo) can provide water to the city. The total capacity to the city from these emergency interconnections is approximately 23 cubic feet per second.

6.2.8 Future Water Projects

The city performs routine maintenance and implements improvements to its groundwater and imported water production and treatment facilities as needed to maintain reliable operations. For example, as mentioned in Section 6.2.2.3, the city completed construction of its manganese treatment project in 2025. The treatment facility is currently online, and operational optimization is ongoing. As part of its long-term water supply strategy, the city plans to increase groundwater pumping to the city's full adjudicated rights (1,131 AFY) by rehabilitating Well 11A and Well 15 and potentially even explore leasing water rights from other West Coast Basin pumpers.

6.2.9 Summary of Existing and Planned Sources of Water

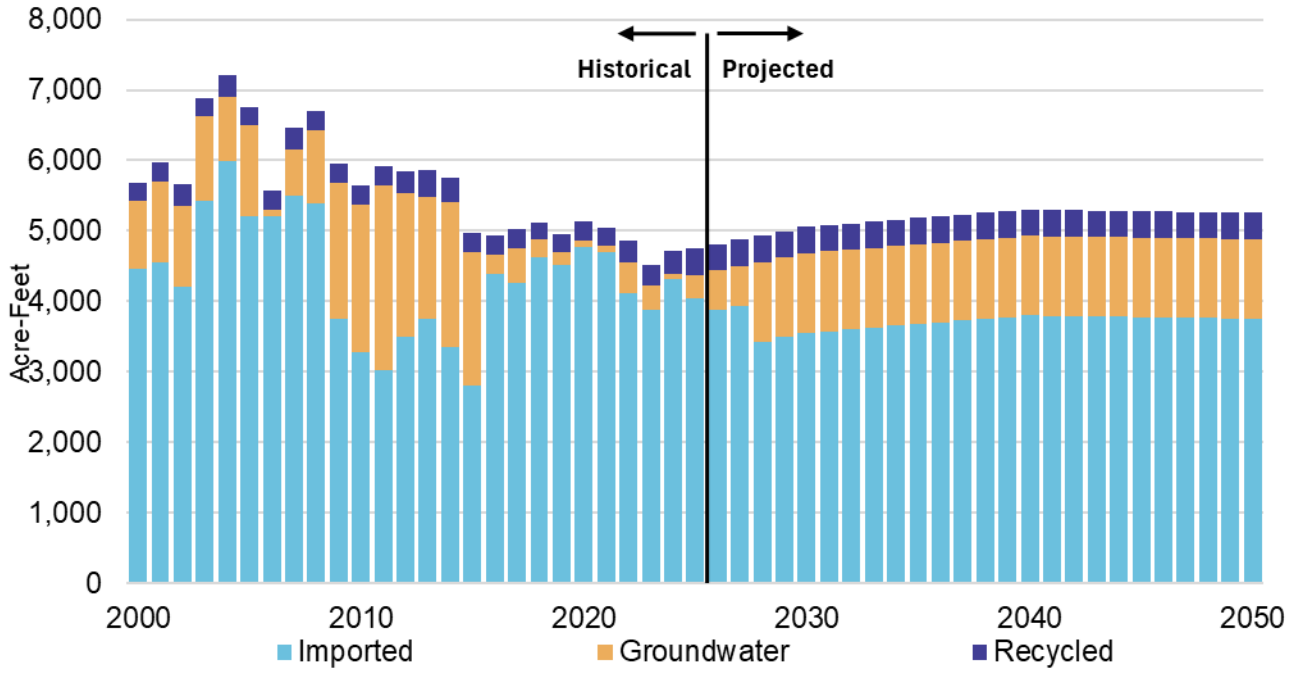
Table 6-2 and Figure 6-8 provide a summary of existing and projected supplies discussed in this section. The city anticipates having sufficient water supplies to meet projected demands through 2050. Note that imported water supplies were set to equal the difference between projected demands and projected groundwater and recycled water supplies.

Table 6-2: Actual and Projected Water Supply (AFY)

Water Supply	Additional Detail	Water Type	2025	2030	2035	2040	2045	2050
Groundwater (not desalinated)	West Coast Basin	Potable	338	1,131	1,131	1,131	1,131	1,131
Purchased or Imported Water[1]	Imported Water from WBMWD	Potable	4,037	3,550	3,679	3,796	3,774	3,752
Recycled Water	Recycled Water from WBMWD	Non-Potable	374	374	374	374	374	374
		Total:	**4,749**	**5,055**	**5,184**	**5,301**	**5,279**	**5,257**

[1] Imported water supplies shown in the table were set to equal the difference between projected demands and projected groundwater and recycled water supplies in each scenario. The city could access more imported water than shown if needed, as these projections are below historical use and WBMWD is expected to have sufficient supplies under normal, single-dry, and multiple-dry year conditions.

Figure 6-8: Actual and Projected Water Supply



6.3 Energy Intensity

The estimated energy use for water management processes in kilowatt-hours per acre-foot (kW-h/AF) is summarized in Table 6-3. The unit energy data are from available energy use records and historic production from September 2024 – August 2025 and only includes groundwater well production.

Table 6-3: Energy Reporting - Total Utility Approach

Parameter	Total Utility
Volume of Water Entering Process (AF)	185
Energy Consumed (kWh)	2,850
Energy Intensity (kWh/AF)	15.4

7 Water Service Reliability and Drought Risk Assessment

This section describes the water service reliability through 2050. As required by the UWMP Act, the assessment must compare total projected water supply and demands over the next 20 years in five-year increments under normal, single dry water years, and multiple dry water years. This section also includes the drought risk assessment, which provides a snapshot of the anticipated surplus or deficit if a drought were to occur in the next five years.

IN THIS SECTION

7.1 Introduction

Water service reliability is determined based on the security of water supply and water infrastructure security. The supply reliability assessment discusses factors (i.e., climatic, environmental, water quality and legal) that could potentially limit the expected quantity of water available from Manhattan Beach's current and projected sources of supply through 2050. Multiple drought scenarios are considered and the quantitative impacts of the aforementioned factors on water supply and demand are discussed, as well as possible methods for addressing these issues.

Evaluating the water service reliability is critical for water management as it can help identify potential problems before these happen. Water managers can then take proactive steps to mitigate shortages by encouraging water use efficiency, securing new water supplies, and/or investing in infrastructure.

7.2 Water Service Reliability Assessment

Manhattan Beach's 2025 UWMP water service reliability assessment compares total projected water supply and demands over the next 25 years in five-year increments under normal, single dry water year, and five-year consecutive dry period. The approach for the analysis and results are discussed in this section. **Manhattan Beach's 2025 UWMP water service reliability assessment and drought risk assessment (DRA) results indicate that no water shortages are anticipated within the next 25-years under normal, single dry water years, and multiple dry water years.**

7.2.1 Service Reliability – Year Type Characterization

In accordance with CWC Section 10635(a), every urban water supplier must provide their expected water service reliability for a normal year, single dry year, and five consecutive dry years for 2030, 2035, 2040, 2045, and optionally 2050. DWR defines these years as:

- **Normal Year:** This condition represents a single year or an averaged range of years that most closely represents the average water supply available.
- **Single Dry Year:** The single dry year is recommended to be the year that represents the lowest water supply available.
- **Five-Consecutive Year Drought:** The driest five-year historical sequence for the supplier, which may be the lowest average water supply available for five years in a row.

For imported water, the basis of water year data and the supply availability during each year type was based on MWD's 2025 UWMP. Groundwater and recycled water are projected to be 100% reliable in every year type.

7.2.2 Service Reliability - Constraints on Water Sources

Southern California's water supply is subject to natural and man-made forces ranging from drought and earthquakes to environmental regulations and water rights determinations. In

addition, climate change is expected to exacerbate these challenges and potentially introduce new ones. Some of the challenges facing Southern California with respect to water, including Manhattan Beach, include:

- A major earthquake could damage levees within the Delta, the California Aqueduct, and/or the CRA, interrupting water supply to the region for many months, if not years.
- Environmental water demands are increasing, especially in the Delta, thus reducing the availability of water for other uses within California.
- California, like much of the west, is susceptible to long periods of drought.
- Recent studies indicate that Delta and Colorado River supplies will be even more variable than that of the historical record, further stressing California water supplies.
- Many groundwater basins are in an overdraft condition.

Locally, imported water is constrained by the availability of surface water from the SWP, Colorado River Aqueduct and other sources at the WBWMD's disposal. Manhattan Beach purchases wholesale distributed water from WBMWD which is provided by MWD.

Groundwater is constrained by the availability of water replenished to WRD. The West Coast Groundwater Basin is managed by WRD. The basin is reliant on recycled water, imported water, and natural runoff captured in the regional spreading grounds for replenishment. Each of these sources has its own constraints; however, WRD's diversified supply portfolio tends to reduce those constraints.

The imported supply reliability for the city is dependent upon the supply reliability of WBMWD and the West Coast Groundwater Basin. The WBMWD 2025 UWMP describes that WBMWD's water supplies are sufficient to meet projected demands under a normal, single-dry year, and five consecutive year drought (WSC, 2026). Similarly, the city's groundwater rights are assumed to be available under normal, single-dry, and multiple dry years and would only be constrained by the city's facilities to pump the groundwater. The city's capacity to pump groundwater is expected to increase through 2030, as described in Section 6.2.2. Short-term supply constraints are discussed in detail in the WSCP.

7.2.3 Water Service Reliability – Supply and Demand Comparison

Results of the water supply and demand analysis for normal, single dry, and five-year consecutive drought are shown below. Projected supplies were described in Section 6 and summarized in Table 6-2. Projected demand was described in Section 4 and summarized in Table 4-3.

The city expects to have sufficient supplies to meet demands under all water year scenarios based on WBMWD's 2025 projections. Note that imported water supplies were set to equal the difference between projected demands and projected groundwater and recycled water supplies in each scenario. The city remains committed to continuing water conservation efforts to ensure reliability and resiliency in the future.

Table 7-1 provides an assessment of projected normal year supply reliability.

Table 7-1: Normal Year Supply and Demand Assessment

Supplies	2030	2035	2040	2045	2050
Groundwater	1,131	1,131	1,131	1,131	1,131
Imported Water[1]	3,550	3,679	3,796	3,774	3,752
Recycled Water	374	374	374	374	374
Total Supply	**5,055**	**5,184**	**5,301**	**5,279**	**5,257**
Total Demand	5,055	5,184	5,301	5,279	5,257
Difference	**0**	**0**	**0**	**0**	**0**

[1] Imported water supplies shown in the table were set to equal the difference between projected demands and projected groundwater and recycled water supplies in each scenario. The city could access more imported water than shown if needed, as these projections are below historical use and WBMWD is expected to have sufficient supplies under normal, single-dry, and multiple-dry year conditions.

Figure 7-1: Normal Year Supply and Demand Assessment

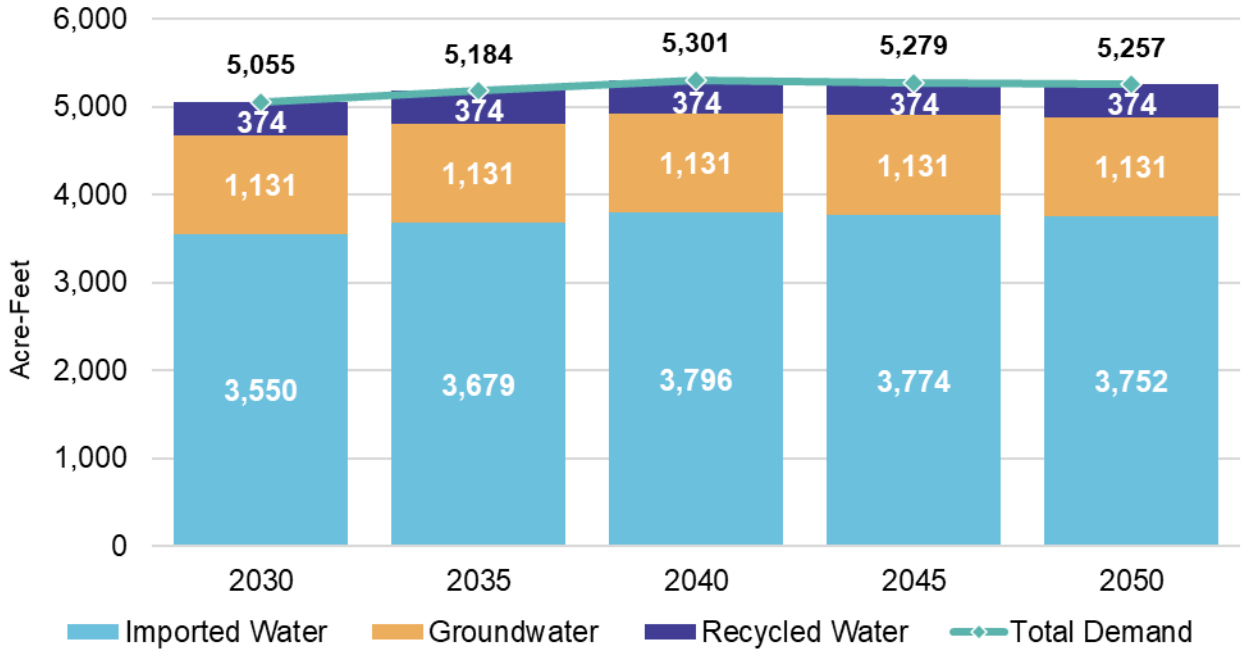


Table 7-2 provides an assessment of projected single dry year supply reliability.

Table 7-2: Single Dry Year Supply and Demand Assessment

Supplies	2030	2035	2040	2045	2050
Groundwater	1,131	1,131	1,131	1,131	1,131
Imported Water[1]	3,550	3,679	3,796	3,774	3,752
Recycled Water	374	374	374	374	374
Total Supply	**5,055**	**5,184**	**5,301**	**5,279**	**5,257**
Total Demand	5,055	5,184	5,301	5,279	5,257
Difference	**0**	**0**	**0**	**0**	**0**

[1] Imported water supplies shown in the table were set to equal the difference between projected demands and projected groundwater and recycled water supplies in each scenario. The city could access more imported water than shown if needed, as these projections are below historical use and WBMWD is expected to have sufficient supplies under normal, single-dry, and multiple-dry year conditions.

Table 7-3 provides an assessment of projected five consecutive dry years supply reliability.

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

		2030	2035	2040	2045	2050
First Year	Supply Totals	5,055	5,184	5,301	5,279	5,257
	Demand Totals	5,055	5,184	5,301	5,279	5,257
	Difference:	0	0	0	0	0
Second Year	Supply Totals	5,081	5,208	5,297	5,274	5,257
	Demand Totals	5,081	5,208	5,297	5,274	5,257
	Difference:	0	0	0	0	0
Third Year	Supply Totals	5,106	5,231	5,292	5,270	5,257
	Demand Totals	5,106	5,231	5,292	5,270	5,257
	Difference:	0	0	0	0	0
Fourth Year	Supply Totals	5,132	5,255	5,288	5,266	5,257
	Demand Totals	5,132	5,255	5,288	5,266	5,257
	Difference:	0	0	0	0	0
Fifth Year	Supply Totals	5,158	5,278	5,283	5,261	5,257
	Demand Totals	5,158	5,278	5,283	5,261	5,257
	Difference:	0	0	0	0	0

7.2.4 Description of Management Tools and Options

Since a significant portion of the city's water supply is provided by WBMWD, which in turn is provided through MWD, the reliability analysis is heavily dependent on the reliability analyses of these agencies. Manhattan Beach is dependent on these sources to provide a reliable water supply and works with WBMWD to ensure water reliability in the future. The city will continue to work with WBMWD to implement any necessary improvements to ensure a reliable, high quality water source.

WBMWD, MWD, and DWR are implementing several water supply strategies to ensure that sufficient supply is available in drought conditions. These strategies include investments in conservation, water recycling, transfer agreements, storage, and supply. Based on these investments, MWD, and WBMWD anticipate that there will be sufficient supply available to meet forecasted demands as described in the WBMWD 2025 UWMP (WSC, 2026).

In addition, the city has invested in restoring its groundwater production capacity to produce up to its groundwater rights so the city can maximize use of local supplies and reduce its reliance on imported water.

7.3 Drought Risk Assessment

CWC Section 10635 (b) requires a drought risk assessment (DRA). The DRA provides a quick snapshot of the anticipated surplus or deficit if a five-consecutive year drought were to occur in the next five years. The DRA can be modified or updated outside of the UWMP five-year plan cycle, so a description of the data, methodology, and basis for shortage conditions must be included in this 2025 UWMP. The DRA evaluates each water supply's reliability and compares available water supplies and projected demands during a five-consecutive dry years scenario. This short-term analysis can help water suppliers foresee undesired risks, such as upcoming shortages, and provide time to evaluate and implement the necessary response actions needed to mitigate shortages in a less impactful manner to the community and environment.

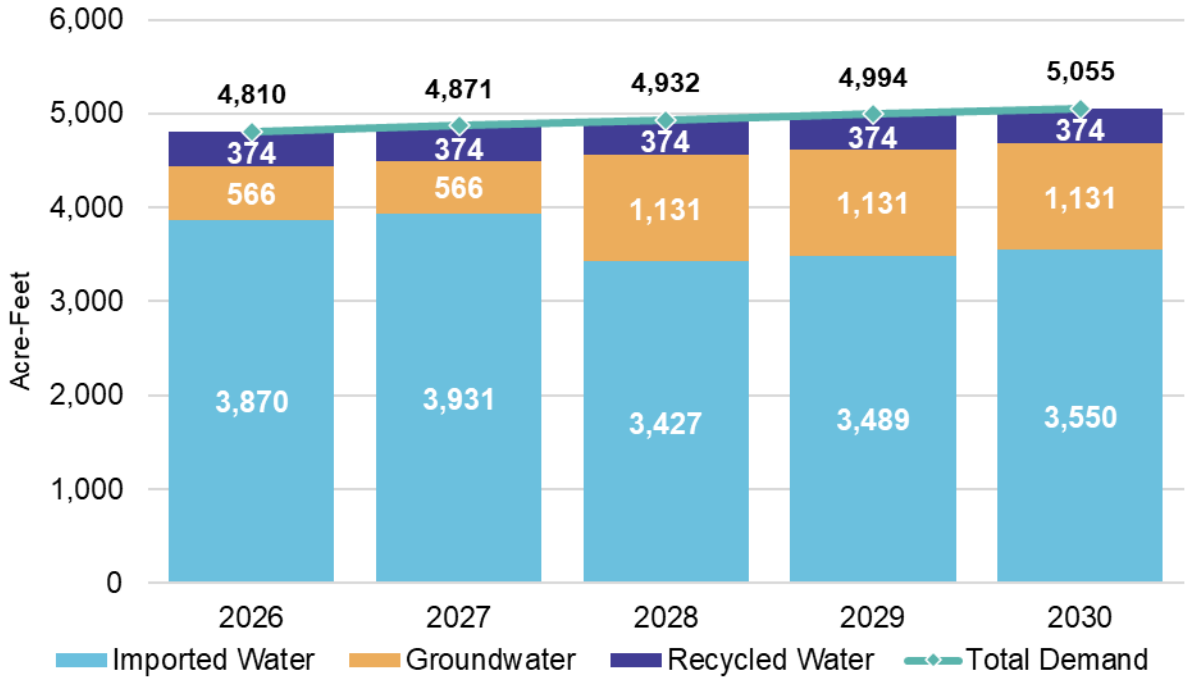
The DRA builds on the water service reliability analysis from Section 7.2 which projected sufficient supply to meet future demands. For this DRA analysis, normal year demand conditions and five consecutive year drought supply conditions were considered for 2026-2030.

Once the city's well rehabilitation projects are completed, Manhattan Beach is expected to have sufficient extraction and treatment capacity to reliably pump up to its full adjudicated right of 1,131 AFY. From 2026-2028 while these projects are ongoing, the city anticipates producing approximately 50% of its adjudicated pumping limit and continuing to blend this groundwater with imported water. Production is expected to increase to full adjudicated pumping rights in 2029.

As discussed above, WBMWD and MWD anticipate having sufficient supply available to meet forecasted demands. No constraints on imported water are anticipated. Demand projection for the next five years is estimated to be a linear trend from 2025 to 2030 projected demands, the assumptions and methods for which were described in Section 4.2.

Manhattan Beach does not anticipate any supply shortages within the next five years, as shown in Table 7-3. The city has adequate supply to meet demand during an immediate five-year drought. years. If necessary, the city can implement various water shortage levels of its WSCP (as discussed in Chapter 8) to reduce its water demands.

Table 7-4: Drought Risk Assessment



8 Water Shortage Contingency Plan

The Water Shortage Contingency Plan (WSCP) is a detailed plan for how Manhattan Beach intends to act in the case of an actual water shortage condition. This allows for management of a shortage with predictability and accountability. This section provides an overview of the contents of Manhattan Beach's WSCP. The standalone WSCP is included in Appendix C.

IN THIS SECTION

- Overview of WSCP Components

8.1 Introduction

CWC Section 10632 requires that every urban water supplier shall prepare and adopt a standalone WSCP as part of its UWMP.

Manhattan Beach's WSCP is included as Appendix C and will be separately submitted to DWR. The WSCP is developed independently of Manhattan Beach's 2025 UWMP and can be amended, as needed, without amending the UWMP.

The WSCP is a strategic plan that Manhattan Beach uses to prepare for and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply available is insufficient to meet the normally expected customer water use at a given point in time. A shortage may occur due to a number of reasons, such as water supply quality changes, climate change, drought, regional power outage, and catastrophic events (e.g., earthquake). Additionally, the State may declare a statewide drought emergency and mandate that water suppliers reduce demands, as occurred in 2014. The WSCP serves as the operating manual that Manhattan Beach will use to prevent catastrophic service disruptions through proactive, rather than reactive, mitigation of water shortages.

The WSCP provides a process for an annual water supply and demand assessment and structured steps designed to respond to actual conditions. This level of detailed planning and preparation provides accountability and predictability and will help Manhattan Beach maintain reliable supplies and reduce the impacts of any supply shortages and/or interruptions.

The WSCP must be updated based on new requirements every five years and will be adopted as a current update for submission to DWR.

8.2 Overview of WSCP Components

The Water Code establishes several prescriptive elements that must be included in a retail water supplier's WSCP. Each element and its location within the WSCP is described below.

Water Supply Reliability Analysis: Summarizes Manhattan Beach's water supply analysis and reliability and identifies any key issues that may trigger a shortage condition.

Annual Water Supply and Demand Assessment Procedures: Describes the key data inputs, evaluation criteria, and methodology for assessing the system's reliability for the coming year and the steps to formally declare any water shortage levels and response actions.

Shortage Stages: Establishes water shortage levels to clearly identify and prepare for shortages.

Shortage Response Actions: Describes the response actions that may be implemented or considered for each stage to reduce gaps between supply and demand.

Communication Protocols: Describes communication protocols under each stage to ensure customers, the public, and government agencies are informed of shortage conditions and requirements.

Compliance and Enforcement: Defines compliance and enforcement actions available to administer demand reductions.

Legal Authorities: Lists the legal documents that grant Manhattan Beach the authority to declare a water shortage and implement and enforce response actions.

Financial Consequences of WSCP Activation: Describes the anticipated financial impact of implementing water shortage stages and identifies mitigation strategies to offset financial burdens.

Monitoring and Reporting: Summarizes the monitoring and reporting techniques to evaluate the effectiveness of shortage response actions and overall WSCP implementation. Results are used to determine if additional shortage response actions should be activated or if efforts are successful and response actions should be reduced.

WSCP Refinement Procedures: Describes the factors that may trigger updates to the WSCP and outlines how to complete an update.

Special Water Feature Distinctions: Identifies exemptions for decorative features aside from pools and spas.

Plan Adoption, Submittal, and Availability: Describes the process for the WSCP adoption, submittal, and availability after each revision.

The WSCP was prepared in conjunction with Manhattan Beach's 2025 UWMP and is a standalone document that can be modified as needed. The document is compliant with CWC Section 10632 and incorporates guidance from the DWR UWMP Guidebook.

9 Demand Management Measures

This section describes Manhattan Beach's efforts to promote water use efficiency, reduce demand on the water supply, and prepare for future requirements.

IN THIS SECTION

9.1 Introduction

This section outlines the city's water conservation efforts over the past five years, current initiatives, and future plans to meet State efficiency standards from DWR.

There are seven required Demand Management Measure (DMM) categories:

- Water waste prevention ordinances
- Metering
- Conservation pricing
- Public education and outreach
- Programs to assess and manage distribution system real loss
- Water conservation program coordination and staffing support
- Other DMMs

9.2 Existing Demand Management Measures

As a member of WBMWD, Manhattan Beach benefits from regional conservation programs offered by WBMWD on behalf of its member agencies. The city has continued to work with WBMWD towards implementing the DMMs. The city differs from larger jurisdictions in the region in its smaller size and predominantly residential character, and the city's conservation approach reflects these community characteristics. This section summarizes the DMMs implemented in coordination with WBMWD.

9.2.1 Water Waste Prevention Ordinances

The city adopted a revised Water Conservation Ordinance which is actively enforced during drought situations and specifies water conservation requirements. Enforcement includes patrolling to educate customers and if necessary, issuing warnings and citations for violations.

9.2.2 Metering

The city meters water service connections for all of its customers, including separate meters for single-family residential, commercial, large landscape, and institutional/governmental customer sectors. The city's water bills provide each customer with summaries of their water use, comparing current water use with water use of the same period of the previous year. The city requires irrigation meters for all large landscape customers. The city has also installed separate meters on all recycled water services. The city will continue to install and read meters on all new services, along with continuing to conduct its meter calibration and replacement program.

The city will continue to install upgrades to fully automate its water meter reading and data management system. The system will track real-time, 24/7 city wide water use that can be viewed on-line by city monitors and water use customers to determine water use consumption patterns. The system is programmed to observe extraordinary water use that deviates from

historical average water use. If extraordinary water usage is identified, city staff and water users are notified by email. Extraordinary usage data is a key tool for identifying improperly programmed irrigation system timers or a leak in the water user's plumbing.

9.2.3 Conservation Pricing

Manhattan Beach has a fixed bimonthly service charge that is calculated by meter size, with usage being billed separately for all customer sectors. The city conducted a Water Rate Study in 2022, which proposed new rates for capital planning and conservation efforts and on June 7, 2022, the City Council adopted Resolution No. 22-0079 adopting the annual rate increases which became effective November 1, 2022.

9.2.4 Public Education and Outreach

Manhattan Beach promotes water conservation and resource efficiency in conjunction with WBMWD. The city distributes public information through bill inserts, brochures, and many special events every year. Water bills show usage for the last billing period compared to the same period the previous year. The city established a website which includes information on water conservation, recycling, and other resource issues.

In addition, as a member of WBMWD, the customers of the city also receive public information about water conservation through WBMWD's various public information programs. WBMWD uses many strategies to help promote its programs to the public. It coordinates with local and regional agencies to promote water conservation messaging as well as developing its own public information programs. As of 2026, the current programs include:

- Water for Tomorrow Campaign: The Water for Tomorrow campaign serves as the foundation of WBMWD's public information and education strategy, guiding annual outreach efforts focused on protecting existing water supplies, diversifying and augmenting the water portfolio, and innovating to prepare for future water reliability challenges.
- WBMWD Public Information and Education Programs: WBMWD conducts public information and education activities to inform residents and businesses about regional water supply issues, communicate the value of District programs, and encourage water conservation and efficient water use.
- WBMWD Newsletter: WBMWD distributes a quarterly electronic newsletter to community leaders and residents that shares information on conservation programs, recycled water projects, education efforts, and District activities.
- Media Relations: WBMWD engages local media through press releases, facility tours, briefings, and events to communicate information about its water supply, conservation, and water recycling activities, particularly during drought and water shortage conditions.
- Social Media and Website: WBMWD uses its website and social media platforms to provide timely information, promote District programs, and engage the public on topics related to water supply, conservation, and water reliability.

- Speakers Bureau: Through its Speakers Bureau, WBMWD delivers presentations to community, business, and government groups on regional water challenges, conservation programs, and District water reliability initiatives.
- Imported Water Supply Tours: WBMWD partners with MWD to offer tours of imported water facilities, providing participants with insight into regional water supply systems and related challenges.
- Water Harvest Festival: The annual Water Harvest Festival is a free, family-friendly event that offers hands-on activities, informational booths, and facility tours to educate the public about water conservation, recycling, and water management.
- Community Outreach and Sponsored Events: WBMWD participates in and sponsors community events throughout its service area, where staff share educational materials, answer questions, and raise awareness of conservation programs and local water supply conditions.
- Water Recycling Tours: WBMWD provides regularly scheduled and special-request tours of the Edward C. Little Water Recycling Facility to explain the recycled water treatment process and its role in supporting regional water supplies.
- Water Education Classes: WBMWD offers free public water education classes, including Know Your H2O courses, landscape classes, and firescaping workshops, which provide information on water issues, conservation practices, and water-efficient landscaping.
- School Education Programs: WBMWD provides free, grade-appropriate water education programs for elementary through high school students within its service area, with instruction focused on water supply sources, conservation, and environmental topics aligned with California's Next Generation Science Standards.

9.2.5 Programs to Assess and Manage Distribution System Real Losses

Regular maintenance of a distribution system is an essential part of a properly operated water distribution system. Manhattan Beach conducts leak surveys when excessive leakage is suspected. Comparison of pumping and purchase records with customer meter readings and other uses such as system flushing can indicate if excessive leakage is occurring in the system.

Main line water leaks are quickly detected by an observed drop in water pressure monitored by a computerized Supervisory Control and Data Acquisition system. The Supervisory Control and Data Acquisition system can alert water personnel about an area that is losing normal system water pressure typically caused by a leak or ruptured pipe. These types of leaks are repaired immediately.

The city has prepared water audits every year since the 2020 UWMP in accordance with CWC Section 10631(d)(3)(B), using methods and a worksheet developed by the American Water Works Association (AWWA). The AWWA audit worksheets require a detailed approach to separate apparent water losses from overall water loss totals to reveal the actual "Real Losses" as well as the "Non- Revenue Water." The city will continue these programs to assess and manage distribution system real losses.

9.2.6 Water Conservation Program Coordination and Staffing Support

Manhattan Beach's water conservation coordinator role is primarily performed by the Water Compliance Supervisor working in conjunction with WBMWD and the School District. The city communicates the importance of water conservation through distribution of conservation handouts at City Hall and information booths at various community fairs. The Water Compliance Supervisor job description includes the performance of the duties associated with the Water Conservation Coordinator position and the expenditures for this program are included in the position salary. In addition, as a member of WBMWD, the city can utilize WBMWD's Water Conservation Coordinator, who is employed by WBMWD to promote water conservation issues and programs within WBMWD's service area.

9.2.7 Other Demand Management Measures

In partnership with WBMWD, Manhattan Beach also participates in the following conservation programs:

- Rain Barrel Program: WBMWD's Rain Barrel Program provides free rain barrels to residents throughout its service area to support rainwater capture and reuse for outdoor irrigation. Between 2020 and 2025, the program included both home delivery and in-person distribution events and resulted in the distribution of approximately 9,000 rain barrels.
- Free Landscape Designs: WBMWD offers free landscape design services to cities, businesses, and residents to support the removal of turf and the transition to water-efficient landscapes. The program also assists participants in meeting design requirements for the regional Turf Replacement Rebate Program.
- Turf Replacement Rebate Program: The Turf Replacement Rebate Program provides financial incentives for the removal of turf grass and conversion to water-efficient landscapes, including upgrades to irrigation systems and runoff reduction features. Participants may also receive tree rebates as part of qualifying turf replacement projects.
- Free Parkway Beautification Program: WBMWD's Free Parkway Beautification Program is a pilot initiative that provides fully funded water-efficient parkway landscapes for low-income residents in underserved disadvantaged communities. Implemented in partnership with MWD using MAAP funding, the program constructed 35 parkways during 2024 and 2025.
- YourSmartYard Program: The YourSmartYard Program is a joint conservation initiative developed with Las Virgenes Municipal Water District and Los Angeles County Waterworks District No. 29 that offers water-saving measures, including discounted landscape designs. The program supports customer participation in turf replacement and other regional conservation incentives.
- Discounted Native Plant Kits: WBMWD partnered with TreePeople and regional agencies to offer discounted native plant kits to residents in Malibu and Topanga.

Through this effort, pre-purchased kits were distributed to support drought-tolerant landscaping and outdoor water efficiency.

- Free Classes, Workshops, and Chats: WBMWD provides free educational classes and workshops on topics such as firescaping and water-efficient landscaping, along with short informational chats focused on rebate application assistance. These offerings support public awareness and participation in water conservation programs.
- Device Rebates: Through MWD's rebate programs, supported by WBMWD and local retailers, customers received financial incentives to install water-efficient devices such as irrigation controllers, high-efficiency appliances, and indoor plumbing fixtures. Rebate activity between 2020 and 2025 is documented using SoCalWaterSmart data.

9.3 Additional Conservation

Manhattan Beach initiated a Community Mulch Program to provide residents with a sustainable method of maintaining their landscapes. Mulch is an essential component of a water-wise, sustainable garden and assists in retaining water on-site. In conjunction with WBMWD, the city participates in the distribution of showerheads, aerators, and toilet tank leak detection tablets. Additionally, the city also offers rebates for residential and commercial water conservation products. WBMWD offers property owners various rebates for water efficient purchases. Clothes washers, toilets, turf removal, and weather-based irrigation controllers are a few of the rebates being offered through the SoCal Water$mart Program. WBMWD offers a free residential home water survey and irrigation devices to develop a water-efficient landscape that conserves water and reduces water run-off. WBMWD also offers an additional dollar to MWD's rebate for a total rebate of $3 or more per square foot of grass removed from residential and commercial landscapes. The city is committed to continually working with WBMWD in this conservation effort. As advances in technology create new conservation devices that are more efficient than today's products, the city and WBMWD plan on incorporating them into this program.

9.4 Reporting Implementation

Manhattan Beach is committed to implementing water conservation programs and works collaboratively with WBMWD to provide water conservation programs for its customers. As a sub-agency of WBMWD, the city's customers have the benefit of participating in WBMWD's conservation efforts. WBMWD provides ample support for water conservation efforts. WBMWD is a signatory to the California Urban Water Conservation Council Memorandum of Understanding regarding Urban Water Conservation in California. As documented in Section 5, Manhattan Beach met its SB X7-7 target and has continued to advance water conservation efforts since that time. Participation metrics associated with these efforts are included in the aggregate totals reported in WBMWD's 2025 UWMP. The city aims to continue outreach and support for implementing future demand management measures. The city will be working over the coming years to tailor its water conservation efforts and implement measures necessary to meet its UWUO to comply with the CWOL Regulation as performance standards become increasingly more stringent.

10 Plan Adoption, Submittal, and Implementation

This section describes the completed steps taken to make the UWMP publicly available as well as adopt and submit the UWMP in accordance with the Water Code.

IN THIS SECTION

- Completed Steps for UWMP and WSCP

10.1 Completed Steps for UWMP and WSCP

The 2025 UWMP and WSCP were made available for public review in May 2026, and a public hearing was held on June 16, 2026, at the City Council meeting to receive public input on the draft documents. Per Government Code 6066, the public hearing was noticed in the Beach Reporter newspaper on May 28, 2026, and noticed again on June 4, 2026. Additionally, the city issued a notice to Los Angeles County more than 60 days prior to the public hearing. All notice documentation is included in Appendix E.

The Manhattan Beach City Council adopted the Final 2025 UWMP and the WSCP at a public meeting on June 16, 2026. A copy of the resolution of adoption is included in Appendix F.

This UWMP was submitted to DWR through the WUEData portal before the deadline of July 1, 2026, and will be available to the public on the city's website.

If Manhattan Beach identifies the need to amend this UWMP or WSCP, it will follow the same procedures used previously for notification to cities, counties, and the public and for initial adoption.

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Appendix A UWMP Checklist

A

2025 Guidebook Location	Water Code Section	Summary as Applies to UWMP	2025 UWMP Location
Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Section 1.3
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.	Section 1.3 and Chapter Intros
Section 2.1	10620(b)	Every person that becomes a Supplier shall adopt UWMP within one year after it has become a Supplier.	n/a
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.	Section 2.1 & Appendix B
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.	Section 2.2
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.	Section 2.1
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.	Section 2.3
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.	Section 2.3
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.	Section 2.3
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.	n/a
Chapter 3.0	10631(a)	Describe the Supplier service area.	Chapter 3
Section 3.3	10631(a)	Describe the climate of the Supplier's service area.	Section 3.3
Section 3.4.1	10631(a)	Provide the current and projected service area populations for 2030, 2035, 2040, 2045 and optionally 2050.	Section 3.4
Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the Supplier's water management planning.	Section 3.4
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.	Section 3.5
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.	Section 4.1
Section 4.3.1	10631(d)(3)(A)	Report the distribution system water loss for each of the five years preceding the plan update.	Section 4.1.2
Section 4.3.2	10631(d)(3)(C)	Retail Suppliers shall provide data to show the distribution loss standards were met.	Appendix B
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.	Section 4.2
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.	Section 4.1.3
Section 4.2.5.3	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	Section 4.1.3
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.	Section 4.1.3
Section 4.2.5.6	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	Section 4.3

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.	n/a
Section 5.2	10608.4	Retail Suppliers shall report on their compliance in meeting their water use targets. Reporting requirements will vary depending on whether the Supplier: - Was considered an urban retail water supplier in 2020, - Met its 2020 target in 2020, or - Was part of a merger or consolidation since 2020. Chapter 5 Subsections 5.2.1, 5.2.2, and 5.2.3 address each of these situations.	Section 5
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.	Section 6.1
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.	Section 6.2
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.	Section 6.2.2
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.	n/a
Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	Section 6.2.2
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.	Section 6.2.2.1
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…	n/a
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.	n/a
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.	Section 6.2.2
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.	Section 6.2.2 & Section 6.2.9
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.	Section 6.2.9
Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.	Section 6.2.7
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.	Section 6.2.5
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.	Section 6.2.5
Section 6.2.5	10633(c)	Describe the recycled water currently being used in the Supplier's service area.	Section 6.2.5
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.	Section 6.2.5.2
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.	Section 6.2.5.2
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.	Section 6.2.5.3
Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the Supplier's service area.	Section 6.2.5.3

Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	Section 6.2.6
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.	Section 6.2.8
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.	Section 6.3
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.	Section 6.2.1, 6.2.2, 7.1
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.	Section 7.2
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.	Section 7.2
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.	Section 7.3
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.	Section 7.3.1
Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Section 7.2.3
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.	Section 7.2.3
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.	Section 7.2.2
Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Appendix C
Chapter 8	10632(a)(1)	Provide an analysis of water supply reliability (from Guidebook Chapter 7) in the WSCP.	Appendix C Section 2
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.	Appendix C Section 3
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.	Appendix C Section 3.1.2
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.	Appendix C Section 4
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.	Appendix C Figure 4-1
Section 8.4	10632(a)(4)(A)	Suppliers with WSCPs that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Appendix C Section 5.1
Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Appendix C Seciton 5.2
Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Appendix C Seciton 5.3
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.	Appendix C Section 5.4
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.	Appendix C Table 5.1
Section 8.4.6	10632.5	The UWMP shall include a seismic risk assessment and mitigation plan.	Appendix C Section 5.6

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.	Appendix C Section 6
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.	Appendix C Section 6
Section 8.6	10632(a)(6)	Retail Supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Appendix C Section 7
Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the Supplier to enforce shortage response actions.	Appendix C Section 8
Section 8.7	10632(a)(7)(B)	Provide a statement that the Supplier will declare a water shortage emergency per Water Code Chapter 3. *Water Shortage Emergencies* .	Appendix C Section 8
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.	Appendix C Section 8
Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Appendix C Section 9
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.	Appendix C Section 9
Section 8.8	10632(a)(8)(C)	Retail Suppliers must describe the cost of compliance with Water Code Chapter 3.3, *Excessive Residential Water Use During Drought* .	Appendix C Section 9
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.	Appendix C Section 10
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.	Appendix C Section 11
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.	Appendix C Section 5.8
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.	Appendix C Seciton 12
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.	Section 9.2
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.	n/a
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).	Section 10.1
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.	Section 10.1
Section 10.4	10621(f)	Each urban water Supplier shall update and submit its 2025 plan to DWR by July 1, 202 6.	Section 10.1
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.	Appendix E
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.	Section 10.1, Appendix E
Section 10.3.2	10642	Provide supporting documentation that the UWMP and WSCP has been adopted as prepared or modified.	Appendix F
Section 10.4	10644(a)	Provide supporting documentation that the Supplier has submitted their UWMP to the California State Library.	Section 10.1
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.	Section 10.1, Appendix E
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.	Section 10.1

Section 10.7.2	10644(b)	If revised, submit a copy of the WSCP to DWR within 30 days of adoption.	Section 10.1
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.	Section 10.1
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.	Appendix F
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.	Section 10.1

Appendix B DWR Standardized Tables

B

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)
CA1910083	City of Manhattan Beach	13,518	4,750
	Total	13,518	4,750
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.			
NOTES:			

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

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

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

Submittal Table 3-1 Retail: Population - Current and Projected Water Code Section 10631(a)						
Population Served	2025	2030	2035	2040	2045	2050(opt)
	34,051	35,568	37,086	38,603	38,603	38,603
NOTES:						

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

Use Type	Additional Description (as needed)	2025 Actual Water Use	
Drop down list May select each use multiple times These are the only use types that will be recognized by the WUEdata online submittal tool		**Potable or Non-Potable** (OPTIONAL) Drop down list	Volume (AF)
Add additional rows as needed			
Single Family	Single Family	Potable	2,892
Multi-Family	Multi Family	Potable	326
Commercial	Commercial and Institutional	Potable	618
Industrial	Industrial	Potable	243
Landscape	Landscape	Potable	168
Distribution System Water Loss	Water Loss	Potable	128
Other (optional)	Recycled Water	Non-Potable	374
		Subtotal Potable	4375
		Subtotal Non-Potable	374
		Total	4,749

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

NOTES:

Submittal Table 4-2 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	Single Family	Potable	3,027	3,130	3,233	3,218	3,204
Multi-Family	Multi Family	Potable	342	353	365	363	362
Commercial	Commercial and Institutional	Potable	605	608	604	602	600
Industrial	Industrial	Potable	232	234	233	232	230
Landscape	Landscape	Potable	169	170	170	169	168
Distribution System Water Loss	Water Loss	Potable	306	315	322	321	319
Other (optional)	Recycled Water	Non-Potable	374	374	374	374	374
		Subtotal Potable	4,681	4,810	4,927	4,905	4,883
		Subtotal Non-Potable	374	374	374	374	374
		Total	5,055	5,184	5,301	5,279	5,257
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.							
NOTES:							

Submittal Table 4-3 Retail: Inclusion in Water Use Projections Water Code Section 10631 (a), 10631 (d)(4)(A), and 10631 (d)(4)(B)	
Are Future Water Savings Included in Projections? **Drop down list (y/n)**	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 4.1.3
Are Lower Income Residential Demands Included In Projections? **Drop down list (y/n)**	Yes
Optional If the method for accounting Lower Income Residential Demands has been included, provide page number where this accounting can be found.	Section 4.2
DWR NOTES: Additional guidance is provided in Appendix K.	
NOTES:	

Submittal Table 4-5 Retail: Water Loss Audit Reporting Water Code Section 10631(d)(3)(A)		
Public Water System ID # Reported in Table 2-1 R	Reporting Period	Submitted to DWR Water Loss Audit Program (yes/no)
Report submittal status for all five years for each Public Water System as available. Add rows as needed		
CA1910051	**2020**	Yes
	2021	Yes
	2022	Yes
	2023	Yes
	2024	Yes
DWR NOTES: Suppliers will provide a link to the WUEdata submittals of their Water Loss Audit Reports.		
NOTES:		

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

Public Water System ID # Reported in Submittal Table 2-1 R	Did the Water Board Calculate a Water Loss Standard for this Public Water System? (y/n) If no, Supplier will not complete this row.	Real Water Loss					Apparent Water Loss				
		State Water Board Standard		Most Recent AWWA Water Loss Audit			State Water Board Standard		Most Recent AWWA Water Loss Audit		
		2028 Real Water Loss Standard per Unit per day	Units for Real Water Loss Drop down list	Number of Units (Connections or Miles corresponding with units selected)	Volume of Total Real Loss (from AWWA Water Loss Audit) (AF)	Real Water Loss Per Unit per Day	2028 Apparent Water Loss Standard per Unit per Day	Units for Apparent Water Loss	Number of Connections	Volume of Total Apparent Loss (from AWWA Water Loss Audit) (AF)	Apparent Water Loss Per Unit per Day
Add additional rows as needed.											
CA1910083	Yes	3.8	Gallons per Service Connection per Day (GPSCD)	13,518	190.8	12.6	7.6	Gallons per Service Connection per Day (GPSCD)	13,518	60.0	4.0

Water Board's Calculated Water Loss Standards

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

NOTES:

Submittal Table 5-1 Retail: SB X7-7 2020 Target Progress Water Code Section 10608.40						
☐	**Check the box if the Supplier was not an Urban Water Supplier during or before the 2020 UWMP reporting cycle. Proceed to the next table.**					
Was Supplier part of a merger or consolidation since 2020?	Regional Alliance Target or Individual Target? Drop down list	2020 Target	Actual 2020 GPCD	Did Supplier Achieve Targeted Reduction for 2020?	**Only for suppliers that did not meet the Target in 2020** **See DWR NOTES below.**	
					Actual 2025 GPCD (From SB X7-7 Compliance Form)	Did Supplier meet the 2020 Target in 2025?
No	Individual Target	144	124	Yes		NA

DWR NOTES:
Suppliers calculating a 2025 GPCD will need to complete and submit SB X 7-7 Compliance Tables to verify the use of SB X7-7 Methodologies.
Suppliers that were part of a merger or consolidation since 2020 see Chapter 5 and Appendix P for guidance.
NA=Not Applicable

NOTES:

Submittal Table 6-1 Retail: Groundwater Volume Pumped
Water Code Section 10631(4) and 10631(4)(c)

☐	Check the box if the Supplier does not pump groundwater. Proceed to the next table.
☐	Check the box if all or part of the groundwater described below is desalinated. (OPTIONAL)

Groundwater Type **Drop Down List** May use each category multiple times	Potable or Non-Potable (OPTIONAL) **Drop down list**	Location or Basin Name	2021 (AF)	2022 (AF)	2023 (AF)	2024 (AF)	2025 (AF)
Alluvial Basin	Potable	West Coast Basin	81	423	359	84	342
		Total	81	423	359	84	342

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.			
	Percentage of 2025 service area served by wastewater collection system (OPTIONAL)			
	Percentage of 2025 service area population served by wastewater collection system (OPTIONAL)			
Wastewater Collection			**Recipient of Collected Wastewater**	
Name of Wastewater Collection Agency	Wastewater Volume Metered or Estimated? OPTIONAL **Drop Down List**	Volume of Wastewater Collected from UWMP Service Area 2025 (AF)	Name of Wastewater Treatment Plant (WWTP) and Place ID Number **Drop down list**	Is WWTP Located Within UWMP Area? **Drop Down List**
LACSD	Estimated	3,086	A.K. Warren Water Resource Facility, Place ID 234156	No
Total Wastewater Received from UWMP Service Area in 2025:		3,086		
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
Total		0	-		0		0		0		0		0	

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
IPR: Indirect Potable Reuse would have the treatment level of its end use requirement in the Level of Treatment drop-down.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:

Submittal Table 6-4 Retail: Recycled Water Direct Beneficial Uses Within Service Area
Water Code Section 10633 (c),(d),(e)

☐ Check box if recycled water is not used and is not planned for use within the service area of the supplier. The supplier will only complete the column on "Potential Recycled Water Use" and submit an accompanying narrative on the feasibility of that potential recycled water use.

Name(s) of Facility/ies Producing (Treating) the Recycled Water (OPTIONAL) :	Edward C. Little Water Recycling Facility
Name of Supplier Operating the Recycled Water Distribution System (OPTIONAL) :	West Basin Municipal Water District
Volume of Supplemental Water Added in 2025 (OPTIONAL) :	
Source of 2025 Supplemental Water (OPTIONAL) :	

Use Type **Drop down list**	**Potable or Non-Potable** (after treatment if treated) (OPTIONAL) Drop down list	Additional Information (as needed)	2025 (AF)	2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)	**Potential Recycled Water Use**	
									Volume	Narrative page number (OPTIONAL)
Other (Description Required)	Non-Potable		374	374	374	374	374	374		
		Subtotal Potable	0	0	0	0	0	0	0	
		Subtotal Non-Potable	374	374	374	374	374	374	0	
		Total	374	374	374	374	374	374	0	0

DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.
Potential recycled water use: a description of the feasibility of these uses must be included in the narrative.
Multiple Producers: If you have multiple recycled water producers, submit a separate table for each.

NOTES:

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

☐	Check the box if recycled water was not used in 2025 nor previously projected for use in 2020. Proceed to the next table.

Use Type Drop Down list	2020 Projection for 2025 (AF)	2025 Actual Use (AF)
Add additional rows as needed		
Other (Description Required)	275	374
Total	275	374

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure reported in Submittal Table 2-3
Additional Guidance: See Appendix M, Section M.21 for detailed guidance on this table.

NOTES:

Submittal Table 6-6 Retail: Methods to Encourage Future Recycled Water Use Water Code Section 10633(f)			
☑	Check the box if the Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.		
	Provide page location of narrative in the UWMP		
Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use (AF)
		Total (AF)	0
		Unit Conversion to AF	0

DWR NOTES:

Units of measure (AF, CCF, MG) MUST remain consistent with units reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.

The unit conversion to Acre Feet addresses the Water Code's requirement that this value be provided in acre-feet.

NOTES:

Submittal Table 6-7 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.
	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) (OPTIONAL) Drop Down list	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					

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:

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)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed				
Purchased or Imported Water	From Metropolitan via West Basin MWD	Potable	4,037	
Groundwater (not desalinated)	West Coast Basin	Potable	338	
Recycled Water		Non-Potable	374	
		Subtotal Potable	4,375	0
		Subtotal Non-Potable	374	0
		Total	4,749	0

DWR NOTES:
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table identifies the unit of measure selected in Submittal Table 2-3.
Total Entitlement: e.g. Water Right, Groundwater Allocation, Contracted Amount.

NOTES:

Optional **Table 6-8DS: Source Water Desalination by Urban Water Supplier**											
☑	Check the box if the Supplier does not reduce salinity in either groundwater or surface water prior to distribution.										
Desalination Facility **Drop Down list**	Plant Capacity	Intake Type **Drop down list**	Source Water Type **Drop down list**	Influent TDS	Brine Discharge **Drop down list**	Volume of Water Desalinated					Name(s) of Agencies that Receive this Water
						2021 (AF)	**2022 (AF)**	**2023 (AF)**	**2024 (AF)**	**2025 (AF)**	
					Total	0	0	0	0	0	
DWR NOTES: **Units of measure (AF, CCF, MG)** must remain consistent throughout the UWMP as reported in Submital Table 2-3. This table identifies the units of measure reported in Submittal Table 2-3.											
NOTES:											

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) (OPTIONAL) Drop Down list	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)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)	Reasonably Available Volume (AF)	Total Entitlement (OPTIONAL) See 'DWR Notes' below (AF)
Add additional rows as needed												
Purchased or Imported Water	From Metropolitan via West Basin MWD	Potable	3,550		3,679		3,796		3,774		3,752	
Groundwater (not desalinated)	West Coast Basin	Potable	1,131	1,131	1,131	1,131	1,131	1,131	1,131	1,131	1,131	1,131
Recycled Water		Non-Potable	374		374		374		374		374	
		Subtotal Potable	4,681	1,131	4,810	1,131	4,927	1,131	4,905	1,131	4,883	1,131
		Subtotal Non-Potable	374	0	374	0	374	0	374	0	374	0
		Total	5,055	1,131	5,184	1,131	5,301	1,131	5,279	1,131	5,257	1,131

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 Submittal Table O-1B: Recommended Energy Reporting - SINGLE DELIVERY PRODUCT - TOTAL UTILITY APPROACH

Water Delivery Product drop down list (If delivering more than one type of product recommend using Table O-1C)	Retail Potable Deliveries	**Only for Water Delivery Products Under the Urban Water Supplier's Operational Control**		
Start Date of Reporting Period	5/1/2020	**Sum of All Water Management Processes**	**Non-Consequential Hydropower**	
End Date of Reporting Period	4/30/2021			
Is upstream embedded energy in the values reported?	No			
Units of Measure for Water	AF	**Total Utility** See DWR NOTES	**Hydropower**	**Net Utility**
Volume of Water Entering Process		185		185
Energy Consumed (kWh)		2,850		2,850
Energy Intensity (kWh/vol. converted to MG)		47.3	-	47

DWR NOTES:

Total Utility: The volume of water entered in the "Total Utility" column should equal the volume of water entering the distribution system (excluding recycled water); in most cases, this is the total volume calculated in UWMP Table 4-1: 2025 Actual Total Uses for Potable and Non-Potable Water. Note if recycled water is included in your Submittal Table 4-1, you must exclude it from your volume in this table.

Quantity of Self-Generated Renewable Energy

0 kWh

Data Quality (Estimate, Metered Data, Combination of Estimates and Metered Data)

Data Quality Narrative:

Narrative:

NOTES:

Optional Submittal Table 7-1 Retail: Basis of Water Year Data (Reliability Assessment)

Year Type	Base Year If not using a calendar year, type in the last year of the fiscal, water year, or range of years, for example, water year 2024-2025, use 2025	Available Supplies if Year Type Repeats	
		☐	Check the box if quantification of available supplies is not compatible with this table and is provided elsewhere in the UWMP. **Location:** [insert location from UWMP]
		Quantification of available supplies is provided in this table as either volume only, percent only, or both.	
		Volume Available (AF)	**% of Average Supply**
Average Year	2019	4,693	100%
Single-Dry Year	2020	5,128	109%
Consecutive Dry Years 1st Year	2018	5,084	108%
Consecutive Dry Years 2nd Year	2019	4,945	105%
Consecutive Dry Years 3rd Year	2020	5,128	109%
Consecutive Dry Years 4th Year	2021	5,050	108%
Consecutive Dry Years 5th Year	2022	4,855	103%

DWR NOTES: Supplier may use multiple versions of Submittal Table 7-1 R if different water sources have different base years and the supplier chooses to report the base years for each water source separately. If a Supplier uses multiple versions of Submittal Table 7-1 R, in the "Note" section of each submittal table, state that multiple versions of Submittal Table 7-1 R are being used and identify the particular water source that is being reported in each submittal table.
Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3. This table reports the units of measure reported in Submittal Table 2-3.

NOTES:

Submittal Table 7-2 Retail: Normal Year Supply and Use Comparison Water Code Section 10635 (a)					
	2030 (AF)	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 (AF)**
Supply totals (autofill from Submittal Table 6-9 R)	5,055	5,184	5,301	5,279	5,257
Use totals (autofill from Submittal Table 4-2 R)	5,055	5,184	5,301	5,279	5,257
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES:					

Submittal Table 7-3 Retail: Single Dry Year Supply and Use Comparison Water Code Section 10635(a)					
	2030 (AF)	**2035 (AF)**	**2040 (AF)**	**2045 (AF)**	**2050 (AF)**
Supply totals	5,055	5,184	5,301	5,279	5,257
Use totals	5,055	5,184	5,301	5,279	5,257
Surplus/(shortfall)	0	0	0	0	0
OPTIONAL Planned WSCP Actions					
WSCP - supply augmentation benefit					
WSCP - use reduction savings benefit					
Revised Surplus/(shortfall)					
DWR NOTES : Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.					
NOTES					

Submittal Table 7-4 Retail: Multiple Dry Years Supply and Use Comparison Water Code Section 10635(a)						
		2030 (AF)	2035 (AF)	2040 (AF)	2045 (AF)	2050 (AF)
First year	Supply totals	5,055	5,184	5,301	5,279	5,257
	Use totals	5,055	5,184	5,301	5,279	5,257
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Second year	Supply totals	5,081	5,208	5,297	5,274	5,257
	Use totals	5,081	5,208	5,297	5,274	5,257
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Third year	Supply totals	5,106	5,231	5,292	5,270	5,257
	Use totals	5,106	5,231	5,292	5,270	5,257
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fourth year	Supply totals	5,132	5,255	5,288	5,266	5,257
	Use totals	5,132	5,255	5,288	5,266	5,257
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
Fifth year	Supply totals	5,158	5,278	5,283	5,261	5,257
	Use totals	5,158	5,278	5,283	5,261	5,257
	Surplus/(shortfall)	0	0	0	0	0
	OPTIONAL Planned WSCP Actions					
	WSCP - supply augmentation benefit					
	WSCP - use reduction savings benefit					
	Revised Surplus/(shortfall)					
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.						
NOTES:						

Submittal Table 7-5 Retail: Five-Year Drought Risk Assessment Water Code Section 10635(b)(3)	
2026	**Total**
Total Water Use (AF)	4,810
Total Supplies (AF)	4,810
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2027	**Total**
Total Water Use (AF)	4,871
Total Supplies (AF)	4,871
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2028	**Total**
Total Water Use (AF)	4,932
Total Supplies (AF)	4,932
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2029	**Total**
Total Water Use (AF)	4,994
Total Supplies (AF)	4,994
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
2030	**Total**
Total Water Use (AF)	5,055
Total Supplies (AF)	5,055
Surplus/Shortfall w/o WSCP Action	0
OPTIONAL Planned WSCP Actions (use reduction and supply augmentation)	
WSCP - supply augmentation benefit (AF)	
WSCP - use reduction savings benefit (AF)	
Revised Surplus/(shortfall)	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.	
NOTES:	

Submittal Table 8-1: Cross-reference for Standard vs Supplier Shortage Levels Water Code Section 10632(a)(3)(B)			
☑	Check the box if the Supplier uses the Standard six levels of water shortage. Proceed to the next table.		
Standard Shortage Levels	**Percent Shortage Range**	**Suppliers Shortage Levels**	**Percent Shortage Range**
1	Up to 10%	1	Up to 5%
1	Up to 10%	2	Up to 10%
2	Up to 20%	3	Up to 15%
3	Up to 20%	4	Up to 20%
3	Up to 30%	5	25-50%
4	Up to 40%	5	25-50%
5	Up to 50%	5	25-50%
6	>50%	5	25-50%
NOTES:			

Submittal Table 8-2 Retail: Supply Augmentation and Other Actions Water Code Section 10632(a)(4)(A),(C) and (E)				
	Is the Supplier completing this table using the standard six levels? (yes/no)			
Shortage Level	Supply Augmentation Methods and Other Actions by Water Supplier **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)	
Add additional rows as needed				
1	Transfers	Percentage	n/a	
2	Transfers	Percentage	n/a	
3	Transfers	Percentage	n/a	
4	Transfers	Percentage	n/a	
5	Transfers	Percentage	n/a	
6	Transfers	Percentage	n/a	
DWR NOTES: Units of measure (AF, CCF, MG) must remain consistent throughout the UWMP as reported in Submittal Table 2-3.				
NOTES: The City will consider increased production from the West Coast Basin using existing facilities to address increased demands.				

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

	Is the Supplier completing this table using the standard six levels? (yes/no)

Shortage Level	Demand Reduction Actions **Drop down list** These are the only categories that will be accepted by the WUEdata online submittal tool. Select those that apply.	How much is this going to reduce the shortage gap?		Additional Explanation or Reference (OPTIONAL)	Penalty, Charge, or Other Enforcement? **For Retail Suppliers Only** Drop Down List
		Volume or Percentage Drop down	Shortage Gap Reduction Value (May be a range) (AF)		
At All Times	Landscape - Limit landscape irrigation to specific times				Yes
At All Times	Landscape - Restrict or prohibit runoff from landscape irrigation				Yes
At All Times	Other - Require automatic shut of hoses				Yes
At All Times	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water				Yes
At All Times	Other - Prohibit use of potable water for washing hard surfaces				Yes
At All Times	Water Features - Restrict water use for decorative water features, such as fountains				Yes
At All Times	Pools - Allow filling of swimming pools only when an appropriate cover is in place.				Yes
At All Times	CII - Restaurants may only serve water upon request				Yes
At All Times	CII - Commercial kitchens required to use pre-rinse spray valves				Yes
At All Times	CII - Lodging establishment must offer opt out of linen service				Yes
At All Times	Other - Require automatic shut of hoses				Yes
At All Times	Landscape - Other landscape restriction or prohibition				Yes
1	Landscape - Limit landscape irrigation to specific times	Volume	Collective reduction from all Shortage Level 1 actions is up to 313 AF	Landscape irrigation shall be limited to two times per week for no more than 15 minutes per watering zone	Yes
1	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 1 actions is up to 313 AF		Yes
2	Other	Volume	Collective reduction from all Shortage Level 2 actions is up to 627 AF	All actions under Shortage Level 1	Yes
2	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Volume	Collective reduction from all Shortage Level 2 actions is up to 627 AF		Yes
2	Other	Volume	Collective reduction from all Shortage Level 2 actions is up to 627 AF	Home reverse osmosis treatment units and water softeners shall be disconnected or turned off	Yes
2	Landscape - Prohibit certain types of landscape irrigation	Volume	Collective reduction from all Shortage Level 2		Yes
		Volume	actions is up to 627 AF		
2	Landscape - Limit landscape irrigation to specific days	Volume	Collective reduction from all Shortage Level 2 actions is up to 627 AF	Limited to only drip irrigation, hand held hoses, or reclaimed water	Yes
3	Other	Volume	Collective reduction from all Shortage Level 3 actions is up to 940 AF	All actions under Shortage Level 2	Yes
3	Other water feature or swimming pool restriction	Volume	Collective reduction from all Shortage Level 3 actions is up to 940 AF		Yes
3	Landscape - Prohibit all landscape irrigation	Volume	Collective reduction from all Shortage Level 3 actions is up to 940 AF	Except with a watering can using water captured from indoor use	Yes
4	Other	Volume	Collective reduction from all Shortage Level 4 actions is up to 1,254 AF	All actions under Shortage Level 3	Yes
5	Other	Volume	Collective reduction from all Shortage Level 5 actions is up to 1,567 AF	All actions under Shortage Level 4	Yes
6	Other	Volume	Collective reduction from all Shortage Level 6 actions is greater than 1,567 AF	All actions under Shortage Level 5	Yes

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

NOTES:

Submittal Table 10-1 Retail: Notification to Cities and Counties Water Code Section 10621(b) and 10642		
City Name	60 Day Notice **Drop Down (yes/no)**	Notice of Public Hearing **Drop Down (yes/no)**
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		
Los Angeles County	Yes	Yes
NOTES:		

Appendix C Water Shortage Contingency Plan

C

Water Shortage Contingency Plan

City of Manhattan Beach

MAY 2026 | CITY OF MANHATTAN BEACH

CITY OF MANHATTAN BEACH

Water Shortage Contingency Plan

UPDATED: MAY 2026

DRAFT

Updated by Water Systems Consulting, Inc.

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ACRONYMS & ABBREVIATIONS

CII	Commercial, Industrial, and Institutional
CITY	City of Manhattan Beach
CWC	California Water Code
DWR	California Department of Water Resources
ERP	Emergency Response Plan
LHMP	Local Hazard Mitigation Plan
MWD	Metropolitan Water District of Southern California
RRA	Risk and Resilience Assessment
UWMP	Urban Water Management Plan
WBMWD	West Basin Municipal Water District
WSCP	Water Shortage Contingency Plan

1.0 General Description

The California Water Code (CWC) Section 10632 requires that every urban water supplier prepare and adopt a standalone Water Shortage Contingency Plan (WSCP) as part of its Urban Water Management Plan (UWMP). The WSCP is developed independently of the City of Manhattan Beach's (City) UWMP and can be amended, as needed, without amending the UWMP.

The WSCP is a strategic plan that the City uses to prepare for and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply available is insufficient to meet the normally expected customer water use at a given point in time. A shortage may occur due to a number of reasons, such as water supply quality changes, climate change, drought, regional power outage, and catastrophic events (e.g., earthquake). Additionally, the State may declare a statewide drought emergency and mandate that water suppliers reduce demands, as occurred in 2014. The WSCP serves as the operating manual that the City will use to prevent catastrophic service disruptions through proactive, rather than reactive, mitigation of water shortages.

The WSCP provides a process for an annual water supply and demand assessment and structured steps designed to respond to actual conditions. This level of detailed planning and preparation provides accountability and predictability and will help the City maintain reliable supplies and reduce the impacts of any supply shortages and/or interruptions.

The WSCP must be updated based on new requirements every five years and will be adopted as a current update for submission to the California Department of Water Resources (DWR).

2.0 Water Service Reliability Analysis

The City's sources of supply were discussed in Section 6 of the 2025 UWMP and consist of groundwater from the West Coast Groundwater Basin, treated imported water purchased from West Basin Municipal Water District (WBMWD) which receives imported supply from the Metropolitan Water District of Southern California (MWD), and recycled water supplies. The reliability of the various sources of supply are discussed in Chapter 7 of the 2025 UWMP. Imported water supplies may be impacted in the event MWD implements its Water Supply Allocation Plan due to a water supply shortage. Manhattan Beach's 2025 UWMP water service reliability assessment and drought risk assessment results indicate that no water shortages are anticipated within the next 25-years under normal, single dry water years, and multiple dry water years. Since a significant portion of the City's water supply is provided by WBMWD, which in turn is provided through MWD, the reliability analysis is heavily dependent on the reliability analyses of these agencies. Manhattan Beach is dependent on these sources to provide a reliable water supply and works with WBMWD to ensure water reliability in the future. The City

will continue to work with WBMWD to implement any necessary improvements to ensure a reliable, high quality water source.

3.0 Annual Water Supply and Demand Assessment Procedures

The City is required to submit an "Annual Water Supply and Demand Assessment" (Annual Assessment) in accordance with DWR's guidance and requirements. The Annual Assessment will include a review of the City's unconstrained water demands (i.e. water demands prior to any projected response actions the City may trigger under this WSCP) for the current year and the upcoming (potential single dry) year. The City will also include information regarding anticipated shortages, triggered shortage response actions, compliance and enforcement actions, and communication actions consistent with the City's WSCP.

For each Annual Assessment, the City plans to prepare a preliminary assessment which evaluates the adequacy of its water supplies for the current and upcoming years by April of each year. The preliminary assessment will include a review of water supplies for at least a single dry year.

The components of Annual Assessment consist of the following:

- A written decision-making process
- Key data inputs and assessment methodology

3.1.1 Decision Making Process

The City pumps groundwater from the West Coast Groundwater Basin and purchases imported water supplies from WBMWD as its primary sources of water supply. Consequently, during the third quarter of each fiscal year the City will review its water demands from the initial six months along with the current groundwater basin conditions and local hydrology. This information will be used to help develop the Annual Assessment. A draft of the Annual Assessment will be circulated internally within the City for peer review and comment. Based on comments received, a redraft will be prepared and provided to the City's Public Works Director during the spring of each year. The draft will subsequently be provided to the City Manager for final review.

If no water shortage is anticipated, the Annual Assessment may be finalized and submitted to the State by July 1. If a water shortage is anticipated, the Annual Assessment will be presented to City Council with recommended shortage response actions. The City Council will make formal determination of water shortage condition, declare water shortage emergency, and authorize shortage response actions. The final Annual Assessment will be provided to DWR no later than July 1 of each year.

The Annual Assessments will be instrumental in providing guidance to the City for decisions regarding potential declarations of a water supply shortage and implementation of water

reduction stages, instituting mandatory water restrictions, promoting water use efficiency and conservation programs, water rates and drought rate surcharges, and the necessity of pursuing alternative water supplies. This process will help ensure adequate water supplies resources are available to the City.

3.1.2 Data Methodologies

The key data inputs and methodologies which will be evaluated by the City during the preparation of the preliminary assessment will include the following:

1. Evaluation Criteria: The locally applicable evaluation criteria used to prepare the Annual Assessment will be identified. The evaluation criteria will include, but is not limited to, an analysis of current local hydrology (including rainfall and groundwater levels), current water demands, a review of water system improvement plans which may impact infrastructure availability, and water quality regulations which may impact groundwater availability.
2. Water Supply: A description of each available water supply source will be provided. The descriptions will include a quantification of each available water supply source and will be based on review of current production capacities, historical production, UWMPs, and prior water supply studies (including Water Supply Assessments and/or Master Plans).
3. Unconstrained Water Demand: The potential unconstrained water demands during the current year and the upcoming (potential single dry) year will be reviewed. The review will include factors such as weather, existing and projected land uses and populations, actual customer consumption and water use factors, monthly Urban Water Supplier Monthly Reports, existing water shortage levels (see Section 4.0), and existing water conservation ordinances (see Section 9 of the 2025 UWMP).
4. Planned Water Use for Current Year Considering Dry Subsequent Year: The water supplies available to meet the demands during the current year and the upcoming (potential single dry) year will be considered and identified by each type of supply. The evaluation will include factors such as estimated water demands, weather, groundwater basin operating safe yields, water quality results, existing available pumping capacities, imported water allocations, contractual obligations, regulatory issues, use of emergency interconnections, and the costs associated with producing each water supply source.
5. Infrastructure Considerations: The capabilities of the water distribution system infrastructure to meet the water demands during the current year and the upcoming (potential single dry) year will be considered. Available production capacities (e.g. groundwater well capacities) and distribution system water losses (see Section 4 of the 2025 UWMP) will be reviewed. In addition, capital improvement and replacement projects, as well as potential projects which may increase water system and production capacities (see Section 6 of the 2025 UWMP), will be considered.
6. Other Factors: Additional local considerations, if any, which can affect the availability of water supplies will be described.

4.0 Water Shortage Stages

The City will manage water supplies prudently to minimize the adverse impacts of water shortages. The City's plan for water usage during periods of shortage is designed to incorporate six standard water shortage levels corresponding to progressive ranges from up to 10, 20, 30, 40, and 50 percent shortages and greater than a 50 percent shortage.

The City's Ordinance No. 15-0008, adopted in 2015, previously established five (5) water shortage levels. A copy of Ordinance No. 15-0008 is provided in Appendix A. In accordance with the California Water Code in which urban water suppliers are required to define six standard water shortage level, the City has developed the crosswalk illustrated below in Figure 4-1 that translated the City's previously established shortage levels to the mandated standard shortage levels.

Figure 4-1: Relationships Between City and Mandated Shortage Levels

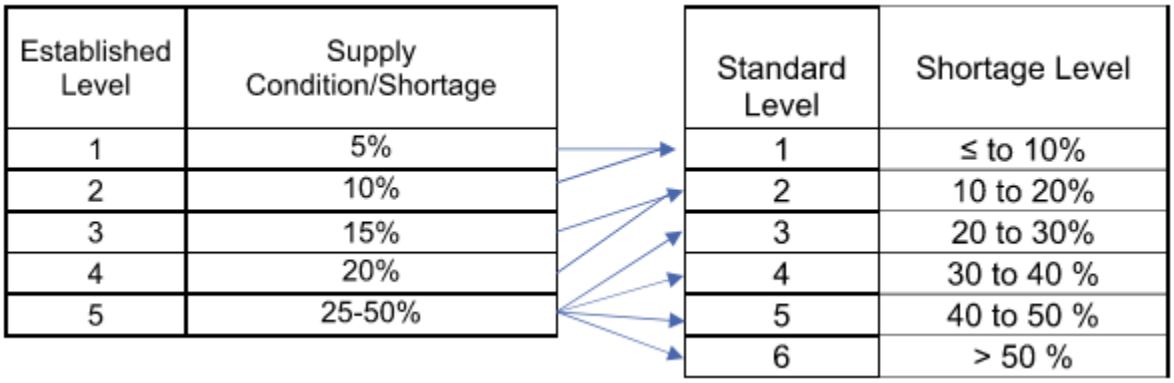


Table 4-1 provides a description of the stages of action which may be triggered by a shortage in one or more of the City's water supply sources, depending on the severity of the shortage and its anticipated duration.

Table 4-1. Water Shortage Contingency Planning Levels

Shortage Level	Percent Shortage Range	Shortage Response Actions
1	Up to 10%	Declaring a Stage 1 Water Shortage demonstrates the need to reduce the City's water demand by a maximum of 10%. In addition to the general prohibitions, the following water use restrictions are to be implemented during a Shortage Level 1: 1. Limit landscape irrigation to two times per week for not more than 15 minutes per watering zone 2. No landscape watering unless a timed sprinkler system is installed or watering is done with a handheld device.

Shortage Level	Percent Shortage Range	Shortage Response Actions
2	Up to 20%	Declaring a Stage 2 Water Shortage demonstrates the need to reduce the City's water demand by a maximum of 20%. In addition to the Water Shortage Level 1 prohibitions, the following water use restrictions are to be implemented during a Shortage Level 2: 1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services 2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off 3. Watering of nonpublic playing fields with potable water is prohibited 4. Landscape watering with potable water shall be limited to one time per week only by drip irrigation, hand held hoses, or if reclaimed water is utilized
3	Up to 30%	Declaring a Stage 3 Water Shortage demonstrates the need to reduce the City's water demand by a maximum of 30%. In addition to the Water Shortage Level 2 prohibitions, the following water use restrictions are to be implemented during a Shortage Level 3: 1. Filling of residential swimming pools or spas with potable water is prohibited. 2. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use 3. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.
4	Up to 40%	Declaring a Stage 4 Water Shortage demonstrates the need to reduce the City's water demand by a maximum of 40%. No customer of water shall use water contrary to the provisions in Water Shortage Level 3.
5	Up to 50%	Declaring a Stage 5 Water Shortage demonstrates the need to reduce the City's water demand by a maximum of 50%. No customer of water shall use water contrary to the provisions in Water Shortage Level 3.

Shortage Level	Percent Shortage Range	Shortage Response Actions
6	>50%	Declaring a Stage 6 Water Shortage demonstrates the need to reduce the City's water demand by more than 50%. No customer of water shall use water contrary to the provisions in Water Shortage Level 3.

5.0 Shortage Response Actions

5.1 Supply Augmentation

The City does not plan to add a new source of water supply to address customer demands, but instead will consider increased supplies from existing sources. Instead, the City will focus on demand reduction measures in the event existing sources of supply are not sufficient to meet customer demands. As discussed in Chapter 6 of the 2025 UWMP, the City's sources of water supply include groundwater produced from the West Coast Groundwater Basin, imported surface water purchased from WBMWD, and recycled water supplies purchased from WBMWD. The City prepares and submits an Annual Assessment which will include a review of water supplies available to meet water demands for the current and upcoming years. If the City is currently in, or considers entering, one of the standard water shortage levels identified in Section 4.0, the City will consider the water supply (augmentation) actions described below.

For each water shortage level discussed in Section 4.0, the City will consider supplementing its existing water supplies through purchase of additional imported water supplies. Due to previous critically dry conditions, MWD developed the "Water Supply Allocation Plan" whereby available supplies are equitably allocated to its member agencies, including WBMWD. The Water Supply Allocation Plan establishes ten different shortage levels and a corresponding drought allocation to each member agency. Based on the shortage level established by MWD, the Water Supply Allocation Plan provides a reduced drought allocation to a member agency for its Municipal and Industrial (M&I) retail demand. The ratio of MWD water supply drought allocation to local water supply will change based on the Water Supply Allocation Plan stage. The MWD drought allocation can be used to make Full-Service water deliveries at the Tier 1 rate up to a Tier 1 allocation. Any Full-Service water delivered in excess of a drought allocation is subject to a penalty rate in addition to the normal rate paid for the water.

In addition to the Water Supply Allocation Plan, MWD describes supply augmentation actions in its 2025 UWMP (MWD, 2026). MWD's primary first response to any gap between core supplies (from the State Water Project and Colorado River) and demand is to make optimal use of its supply augmentation options, consisting of drawing from flexible supply programs and storage reserves. MWD has developed and actively manages a portfolio of water supply programs including water transfer, storage, and exchange agreements. MWD pursues voluntary water

transfer and exchange programs to help mitigate supply/demand imbalances and provide additional dry-year supply sources. In addition, MWD has developed significant storage capacity in reservoirs, conjunctive use, and other groundwater storage programs totaling approximately 6.0 million AF. Pursuant to MWD's "Emergency Storage Objective", updated in 2019, approximately 750,000 AF of total stored water is emergency storage reserved by MWD for use in the event of supply interruptions. Based on MWD's historical and on-going water supply and storage programs and management practices, the City can potentially continue relying on purchased imported water supplies from MWD through WBMWD for adequate supply augmentation in response to each of the standard water shortage levels identified in Section 4.0.

5.2 Demand Reduction

A full listing of the restrictions/prohibitions associated with each shortage level is provided below, and Table 5-1 summarizes the actions by shortage level and quantifies the estimated reductions associated with each shortage level. The following water conservation requirements shall apply to all persons within the City of Manhattan Beach:

Permanent Water Conservation Measures

A. Landscape.
    a. Watering Hours. No lawn or landscape area shall be spray irrigated between the hours of 9:00 a.m. and 6:00 p.m. on any day. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.
    b. Irrigation Overspray and Runoff. Water shall not spray or flow to any impermeable private or public surface, including but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.
    c. Water Drift. No sprinklers, fountains or other water features shall be operated when winds are so high as to create water drift causing runoff or flow to any impermeable private or public surface, including, but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.
    d. Over-Irrigation. It is prohibited to water or irrigate lawns, turf or other landscape beyond saturation causing runoff or flow to any impermeable private or public surface, including, but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.
    e. Irrigation During/After a Rain Event. It is prohibited to water or irrigate any landscaping within forty-eight (48) hours of a one-tenth of an inch (0.10") or greater rainfall event.
B. Cleaning. No person shall:
    a. Use water to wash, clean or clear any sidewalks, streets, walkways, patios, driveways, alleys or parking areas, whether paved or unpaved, with a hose

connected to a domestic water source unless through use of a water broom or pressure washer.

b. Wash or clean with water any vehicle, including, but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or unmotorized, except by use of a hand-held bucket or similar container or a hose equipped with a positive action quick release shutoff valve or nozzle. This subsection shall not apply to any commercial car washing facility which utilizes a recycling system to capture or reuse water.

C. Water Features and Water Recreation Facilities. No person shall:
   a. Fill any water feature such as a fountain, pond, lake or water display unless the water feature is constructed with a water recirculation system.
   b. Fill any water recreation facility such as a hot tub, spa, permanent swimming or wading pool unless the water recreation facility is constructed, installed or equipped with a cover to reduce water loss due to evaporation.

D. Waste, Ponding and Leaks. No person shall:
   a. Cause, permit or allow water to leak from any exterior or interior pipe, hose or plumbing fixture of any kind whatsoever.
   b. Cause, permit or allow water to flow from any source on private or public property into gutters, streets, alleys or storm drains, except as a result of rainfall or excessive groundwater from a private sump pump or from a nonpotable source of water.
   c. Cause, permit or allow water from any source to pond on private or public property, except as a result of rainfall.
   d. Cause, permit or allow water to flow from any source on private or public property without beneficial use.

E. Eating and Drinking Establishments.
   a. All eating and drinking establishments of any kind whatsoever including, but not limited to, any restaurant, hotel, cafe, cafeteria, bar or club, whether public or private, shall only provide drinking water to any person upon receipt of an express request.
   b. All food service businesses shall install water conserving pre-rinse nozzles.

F. Hotels, Motels, Bed and Breakfast.
   a. All hotels, motels and bed and breakfast establishments shall provide customers the option of choosing not to have towels laundered daily. Each establishment shall prominently display notice of this option in each bathroom and sleeping room using clear easily understood language.
   b. All guest room toilets shall be low flow toilets utilizing the best available technology at the time of installation.

G. Carwashes. All carwash systems shall use water recirculation systems.

H. Commercial Establishments in General.
   a. All nonresidential buildings in the City shall maintain:

i. Public toilets and urinals with best available technology low flow toilets and urinals.
ii. Water efficient dishwashers.

b. Water efficient washing machines shall be installed upon replacement of existing or acquisition of new washing machines in nonresidential buildings.

I. Hoses. No person shall allow water to flow freely from a hose that is not equipped with a positive action quick release shutoff valve or nozzle.

J. Landscape Irrigation.
   a. New Construction. Irrigation with potable water outside of newly constructed homes and buildings shall be delivered by drip or microspray irrigation systems for irrigation projects submitted for City review on July 1, 2015 or after;
   b. New Landscape Irrigation. Irrigation with potable water of new landscape, not associated with new construction, shall be delivered by drip or microspray irrigation systems for irrigation projects submitted for City review on July 1, 2015 or after.

K. Exceptions. The provisions of this section are not applicable to the uses of water that are necessary to protect public health and safety or for essential services, such as police, fire, and other similar emergency services. The provisions of this section also do not apply to non-potable water, such as recycled or reclaimed water.

Water Shortage Level 1

Upon declaration of a Stage 1 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. No landscape watering with potable water unless a timed sprinkler system is installed or watering is done with a handheld device.
2. Landscape watering with potable water shall be limited to two times per week for not more than 15 minutes per watering zone from:
   a. 6:00 p.m. on Wednesday and 9:00 a.m. the following Thursday; and
   b. 6:00 p.m. on Saturday and 9:00 a.m. the following Sunday.
3. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Water Shortage Level 2

Upon declaration of a Stage 2 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.
2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.
3. Watering of nonpublic playing fields with potable water is prohibited.

4. Landscape watering with potable water shall be limited to one time per week only by drip irrigation, hand held hoses, or if reclaimed water is utilized as permitted by law as follows:
    a. Even numbered addresses from 6:00 p.m. on Wednesday to 9:00 a.m. the following Thursday, and
    b. Odd numbered addresses from 6:00 p.m. on Friday to 9:00 a.m. the following Saturday.
5. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Water Shortage Level 3

Upon declaration of a Stage 3 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.
2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.
3. Filling of residential swimming pools or spas with potable water is prohibited.
4. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use.
5. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.
6. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Water Shortage Level 4

Upon declaration of a Stage 4 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.
2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.
3. Filling of residential swimming pools or spas with potable water is prohibited.
4. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use.
5. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.

6. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Water Shortage Level 5

Upon declaration of a Stage 5 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.
2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.
3. Filling of residential swimming pools or spas with potable water is prohibited.
4. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use.
5. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.
6. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Water Shortage Level 6:

Upon declaration of a Stage 6 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.
2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.
3. Filling of residential swimming pools or spas with potable water is prohibited.
4. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use.
5. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.
6. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

Table 5-1. Demand Reduction Actions

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation	Enforcement?
At All Times	Landscape - Limit landscape irrigation to specific times			Yes
At All Times	Landscape - Restrict or prohibit runoff from landscape irrigation			Yes
At All Times	Other - Require automatic shut of hoses			Yes
At All Times	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water			Yes
At All Times	Other - Prohibit use of potable water for washing hard surfaces			Yes
At All Times	Water Features - Restrict water use for decorative water features, such as fountains			Yes
At All Times	Pools - Allow filling of swimming pools only when an appropriate cover is in place.			Yes
At All Times	CII - Restaurants may only serve water upon request			Yes
At All Times	CII - Commercial kitchens required to use pre-rinse spray valves			Yes
At All Times	CII - Lodging establishment must offer opt out of linen service			Yes
At All Times	Other - Require automatic shut of hoses			Yes

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation	Enforcement?
At All Times	Landscape - Other landscape restriction or prohibition			Yes
1	Landscape - Limit landscape irrigation to specific times	Collective reduction from all Shortage Level 1 actions is up to 313 AF	Landscape irrigation shall be limited to two times per week for no more than 15 minutes per watering zone	Yes
1	Landscape - Limit landscape irrigation to specific days	Collective reduction from all Shortage Level 1 actions is up to 313 AF		Yes
2	Other	Collective reduction from all Shortage Level 2 actions is up to 627 AF	All actions under Shortage Level 1	Yes
2	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Collective reduction from all Shortage Level 2 actions is up to 627 AF		Yes
2	Other	Collective reduction from all Shortage Level 2 actions is up to 627 AF	Home reverse osmosis treatment units and water softeners shall be disconnected or turned off	Yes
2	Landscape - Prohibit certain types of landscape irrigation	Collective reduction from all Shortage Level 2 actions is up to 627 AF		Yes
2	Landscape - Limit landscape irrigation to specific days	Collective reduction from all Shortage Level 2 actions is up to 627 AF	Limited to only drip irrigation, hand held hoses, or reclaimed water	Yes
3	Other	Collective reduction from all Shortage Level 3 actions is up to 940 AF	All actions under Shortage Level 2	Yes
3	Other water feature or swimming pool restriction	Collective reduction from all Shortage Level 3 actions is up to 940 AF		Yes

Shortage Level	Demand Reduction Actions	How much is this going to reduce the shortage gap?	Additional Explanation	Enforcement?
3	Landscape - Prohibit all landscape irrigation	Collective reduction from all Shortage Level 3 actions is up to 940 AF	Except with a watering can using water captured from indoor use	Yes
4	Other	Collective reduction from all Shortage Level 4 actions is up to 1,254 AF	All actions under Shortage Level 3	Yes
5	Other	Collective reduction from all Shortage Level 5 actions is up to 1,567 AF	All actions under Shortage Level 4	Yes
6	Other	Collective reduction from all Shortage Level 6 actions is greater than 1,567 AF	All actions under Shortage Level 5	Yes

5.3 Operational Changes

During a water supply shortage situation, the City will manage its water supply resources to provide sufficient water supplies capable of meeting the demands of its customers. Section 4.0 describes the City's standard water shortage levels and associated demand reduction measures. Section 5.1 describes the City's water supply sources and water supply augmentation actions available. The supply augmentation actions and demand reduction measures, when implemented, may potentially result in short-term operational changes which are necessary to allow the City to utilize all available water supply sources in response to water shortage situations.

As noted in Section 3.0, beginning July 1, 2022, the City will prepare and submit an Annual Assessment which will include a review of the water supplies available to meet water demands for the current and upcoming years. Preparation of the Annual Assessment will assist the City in determining any potential operational changes. In addition, the City's standard water shortage levels and the associated demand reduction measures, in conjunction with the City's existing Demand Management Measures (discussed in Chapter 9 of the 2025 UWMP), will be essential to the City in reducing water demands during any water shortage period. The operational changes the City will consider in addressing non-catastrophic water shortages on a short-term basis include the following:

- Improved monitoring, analysis, and tracking of customer water usage to enforce demand reduction measures
- Optimized production from existing available water supply sources
- Potential use of emergency supply sources, including emergency interconnections
- Potential blending of water supply resources
- Improved monitoring, maintenance, and repairs to reduce water distribution system losses

5.4 Additional Mandatory Restrictions

The mandatory restrictions which are implemented by the City to reduce customer demands are discussed in Section 5.1. There are no additional mandatory restrictions planned at this time.

5.5 Emergency Response Plan

Catastrophic water shortages are incorporated in the City's standard water shortage levels and the associated demand reduction measures. In addition to the water supply augmentation actions and potential operational changes which the City may consider to continue providing sufficient water supplies, the City will review and implement any necessary steps included in its "Emergency Response Plan".

As part of the "America's Water Infrastructure Act of 2018", community water systems serving a population greater than 3,300 people, including the City, are required to review and update their "Risk and Resilience Assessment" (RRA) and the associated "Emergency Response Plan"

(ERP) every five (5) years. However, due to security concerns regarding the submitting of these reports, water systems are required to submit certifications to the United States Environment Protection Agency (USEPA) confirming the current RRA and ERP have been reviewed and updated.

The City's RRA, evaluates the vulnerabilities, threats, and consequences from potential hazards to the City's water system. The City prepared its RRA by evaluating the following items:

- Natural hazards and malevolent acts (i.e., all hazards);
- Resilience of water facility infrastructure (including pipes, physical barriers, water sources and collection, treatment, storage and distribution facilities, and electronic, computer and other automated systems);
- Monitoring practices;
- Financial systems (e.g., billing systems);
- Chemical storage and handling; and
- Operation and maintenance.

The City's RRA evaluates a series of potential malevolent acts, natural hazards, and other threats in order to estimate the potential "monetized risks" (i.e. associated economic consequences to both the water system and surrounding region, and the likelihood of occurrence) associated with the City's water facility assets. The cost-effectiveness of implementing potential countermeasures to reduce risks was also reviewed.

The City's ERP, provides the management, procedures, and designated actions the City and its employees will implement during emergency situations (including catastrophic water shortages) resulting from natural disasters, system failures and other unforeseen circumstances. The City's ERP (which is incorporated by reference) will provide the guidelines for evaluating an emergency situation, procedures for activating an emergency response, and details of the different response phases in order to ensure that customers receive a reliable and adequate supply of potable water. The scope of the ERP includes emergencies which directly affect the water system and the ability to maintain safe operations (such as a chlorine release, and earthquake or a threat of contamination). The ERP will also incorporate the results of City's RRA and includes the following:

- Strategies and resources to improve resilience, including physical and cybersecurity
- Plans and procedures for responding to a natural hazard or malevolent act
- Actions and equipment to lessen the impact of a natural hazard or malevolent act
- Strategies to detect natural hazards or malevolent act

The City will review the ERP for procedures regarding the utilization of alternative water supply sources in response to water supply shortages, including during the standard water shortage levels. The City will also review applicable procedures described in the ERP regarding any necessary temporary shutdown of water supply facilities, including appropriate regulatory and public notifications.

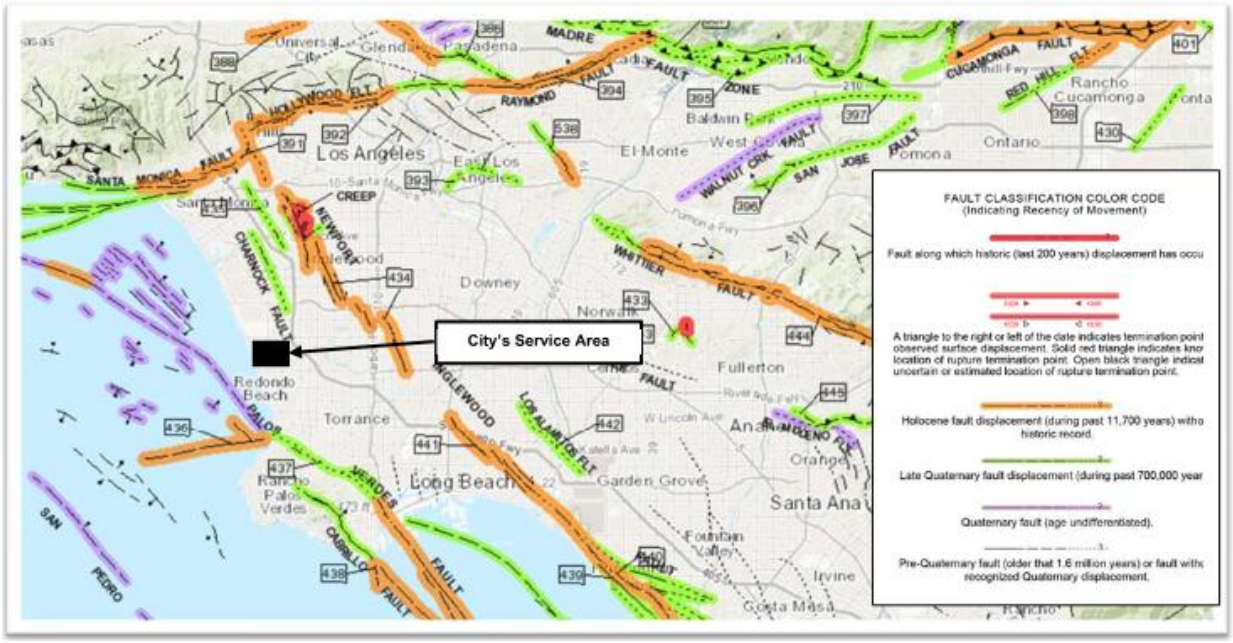
5.6 Seismic Risk Assessment and Mitigation Plan

The City prepared a “Local Hazards Mitigation Plan” which was approved by the Federal Emergency Management Agency (FEMA) in 2025. The Hazard Mitigation Plan identifies effective ways to assess the significant natural hazards (including earthquakes) that may affect the City and its residents. The Hazard Mitigation Plan provides resources, information, and strategies to reduce the City’s vulnerability to these hazards, while providing guidance for the coordination of mitigation activities throughout the City. The Hazard Mitigation Plan includes mitigation projects necessary to reduce seismic risk to the City’s water distribution system facilities (including its distribution system pipelines, groundwater wells, booster pumps, and storage reservoirs) and potential disruptions in providing water service. The City’s Hazard Mitigation Plan is linked in Appendix B.

The County of Los Angeles prepared a “All-Hazards Mitigation Plan” in 2025 which identified methods to assess significant natural hazards (including earthquakes) affecting areas throughout Los Angeles County, and the mitigation strategies necessary to reduce risks, including seismic risk. The County’s All-Hazards Mitigation Plan is linked in Appendix C.

The California Geological Survey has published the locations of numerous faults which have been mapped in the Southern California region. Although the San Andreas fault is the most recognized and can produce an earthquake with a magnitude greater than 8 on the Richter scale, some of the lesser-known faults have the potential to cause significant damage. The locations of these earthquake faults in the vicinity of the City’s water service area are provided in Figure 5-1 below. The faults that are near and could potentially cause significant shaking in the City’s water service area include the San Andreas fault, the Charnock fault, the Newport-Inglewood fault, the Palos Verdes fault, and the Santa Monica Fault.

Figure 5-1. Location of Earthquake Faults

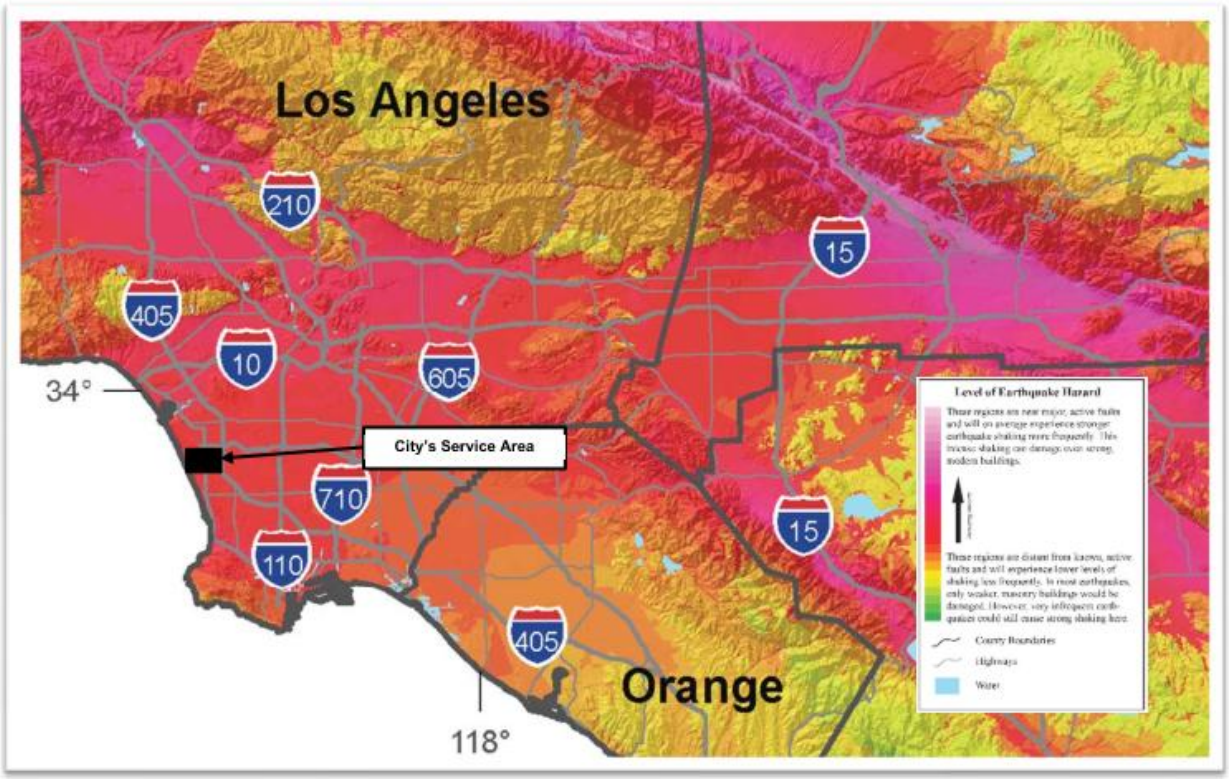


Source: (California Geological Survey, 2026)

Figure 5-2 provides the relative intensity of ground shaking in the vicinity of the City's service area from anticipated future earthquakes. The locations of relatively long- period (1.0 second) earthquake shaking, including the City's service area, are provided.

Long-period shaking affects tall, relatively flexible buildings, but also correlates with earthquake damage. The shaking potential is calculated based on the level of ground motion that has a 2 percent chance of being exceeded in 50 years (or the level of ground- shaking with an approximate 2,500-year average repeat time). As discussed in Section 5.5, the City routinely prepares an Emergency Response Plan which will provide the management, procedures, and designated actions the City and its employees will implement during emergency situations resulting from natural disasters, including during earthquakes, to ensure that customers receive a reliable and adequate supply of potable water.

Figure 5-2. Earthquake Shaking Potential



Source: (California Geological Survey and USGS, 2016)

5.7 Shortage Response Action Effectiveness

The effectiveness of the shortage response actions for each of the standard water shortage levels identified in Section 4.0 is evident in the City's historical ability to meet its customer's water demands in response to a water supply shortage. In addition, the City imposes water consumption regulations and restrictions and supports local agencies in efforts to enforce regulations and prohibitions on water use. The effectiveness of each of the City's shortage response actions, to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction provided in Table 5-1.

Section 6 of the City's 2025 UWMP provides a tabulation of the City's historical annual water demands for each water supply source. During the past 15 years, the City experienced an extended drought within its service area from CY 2012 to CY 2018. Throughout this extended dry year period, the City's annual potable water production ranged from 4,653 AF to 5,542 AF, with an average of approximately 5,058 AF. The 5-year trailing average potable water use declined 980 AFY over this period, from 5,857 in 2011 to 4,878 in 2018. In 2022, again facing drought conditions, the City declared a Stage 1 water shortage in January and a Stage 2 water shortage in June. Potable water usage in 2022 and 2023 decreased from 2021 by 236 and 551 AF, respectively. The City has been able to provide sufficient water supplies to its customers, including during long-term droughts and years with historically high water demands. In addition,

the City has been able to provide water service to meet maximum day water demands for these years, including during the summer months.

The City's potable water demands during the most recent five years (from CY 2021 to CY 2026) averaged approximately 4,466 AFY. Due to conservation efforts and demand management measures (discussed in Chapter 9 of the 2025 UWMP), the City's recent water demands have been significantly less than its historical water demands, including during long-term droughts. The City's projected water demands are provided in Section 6 of the 2025 UWMP and incorporate anticipated reductions in water use rates as a result of ongoing conservation efforts and demand management measures. It is anticipated the City will be able to continue providing sufficient water supplies to its customers to meet projected water demands, including during long-term droughts. In addition, based on historical and on-going management practices, the City will be able to continue relying on its water supply source from West Coast Groundwater Basin for adequate supply augmentation in response to each of the standard water shortage levels identified in Section 4.0.

Based on the City's ability in meeting water demands during past water supply shortages, adopted water shortage levels, adjusted operating safe yields, and long-term droughts, it is anticipated that the City will be able to continue providing sufficient water supplies to its customers during any of its standard water shortage levels. Although adequate supplies are anticipated, the cost of those water supplies may become incrementally more expensive. The City will enact varying levels of its water shortage contingency plan to encourage retail customers to reduce water consumption and at the same time reduce the need to use the more expensive water supplies. Notwithstanding, the effectiveness of each of the City's shortage response actions, in order to reduce any potential gaps between supply and demand, has been quantified in the expected demand reduction provided in Table 5-1. The effectiveness of the City's shortage response actions is based on the City's water demands prior to 2015 (unconstrained demands). The City reduced its water demands in 2015 in response to the Governor's April 1, 2015 Executive Order B-29-15 which mandated statewide reduction in water use of 25 percent. The City's actual water demand reduction during this period was used to estimate the extent of water use reductions for the City's Water Shortage Levels.

5.8 Special Water Feature Distinction

The City's WSCP defines "decorative water features" as water features which are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, but excluding pools and spas. In general, there are additional health and safety considerations in the water supplied to pools and spas compared to decorative water features. As a result, the City's WSCP has reviewed the response actions, enforcement actions, and monitoring and reporting programs separately for decorative water features and for pools and spas, as applicable. Under the City's Municipal Code 7.44.020, no person shall fill any water feature unless the water feature is constructed with a water recirculation system or fill any water recreation facility.

6.0 Communication Protocols

Pursuant to CWC 10632.1, The City's Annual Assessment will be submitted to DWR by July 1 of each year or within 14 days of receiving its final allocation, whichever is later. The Annual Assessment will provide information on the City's anticipated shortage, triggered response actions, compliance and enforcement actions, and communication actions, as discussed in Section 3.0. The City may use the Annual Assessment as a method of declaring the appropriate water shortage level.

The City will evaluate the projected supply and demand for water by its customers and shall recommend to the City Council the extent of the conservation required by its customers. The City Council will discuss the appropriate phase of water conservation be implemented, modified, or rescinded. The City Council may impose a water shortage level after a public hearing, notice of which shall be published not less than 10 days before the hearing in a newspaper of general circulation within the City. The City will publish information regarding the adoption of any declaring a water shortage level in a daily newspaper of general circulation. The information provided will include the declared shortage level, response action associated with each shortage level, and any other relevant information relating to the resolution.

7.0 Compliance and Enforcement

The City prosecutor, any peace officer or City code enforcement officer shall have the authority to enforce the provisions of this chapter. If any customer should fail to comply with the rules and regulations, the City shall advise the customer of such failure by written notice. A failure to remedy or abate such noncompliance within seven days after notification shall constitute an infraction and may, at the City’s discretion, be punishable by a fine of nor more than $100.00 for a first violation, a fine of not more than $200.00 for a second violation of the same provision of this chapter within one year, or a fine of not more than $500.00 for each additional violation of the same provision of this chapter within one year.

Any offense that would otherwise constitute an infraction shall be deemed a misdemeanor if a defendant has been convicted of two or more prior violations of this Chapter within the 12-month period immediately preceding the commission of the offense. Each day that a violation occurs shall constitute a separate offense. Punishment under this chapter shall not preclude punishment pursuant to any provision of state law pertaining to water conservation or any other remedies, penalties or procedures provided by law.

8.0 Legal Authority

In 2015, the City Council previously adopted Ordinance No.15-008, amending Chapter 7.44 of the Manhattan Beach Municipal Code regarding Water Conservation (Appendix A). If the demand of water consumers cannot be satisfied without depleting a substantial amount of water

supply needed for human consumption, sanitation, and fire protection, the City shall declare a water shortage emergency. The City shall coordinate with any city or county within its service area for possible declaration of a local emergency including the City of El Segundo and the Los Angeles County.

9.0 Financial Consequences of WSCP Implementation

The City maintains financial operating reserves, which may be used for water system expenditures to make up for unanticipated shortfalls in water revenue as the result of reduced water sales. The City's existing rate structure allows the City to collect a Rate Stabilization Reserve that would buffer revenue shortfalls to avoid having to immediately raise rates as conservation takes hold.

10.0 Monitoring and Reporting

The City takes several steps to monitor water consumption during various stages of water supply shortage. The reduction monitoring procedure is described below.

1. Water Supply Report
   Potable water production figures are recorded daily. Totals are reported monthly to the City's Water Distribution Supervisor are incorporated into a Water Supply Report. This report is then forwarded to the WBMWD and the WRD. With this data it is possible to develop trends for monthly water production and use.
2. Water Usage Records
   The City maintains water use records on each individual customer account. Exceptionally high usage is identified at the time the meter is read. These accounts are investigated for potential water loss or abuse. Additionally, water use graphical trends are recorded on a customer's water bill, comparing water use for the current billing cycle to the same billing cycle of the previous year.
3. Monthly Water Production Report
   During all stages of a water shortage, daily production figures are reported to and monitored by the City's Water Distribution Supervisor. The Water Distribution Supervisor compares the monthly production to the target monthly production to verify that the reduction goal is being met.

11.0 WSCP Refinement Procedures

The City's WSCP has been prepared as an adaptive management plan. As discussed in Section 10.0, the City will monitor and report on the implementation of the WSCP. The City will review the implementation results for any current or potential shortage gaps between water

supplies and demands. The City will evaluate the need for revising the WSCP to resolve any shortage gaps, as necessary. The City will consider the following potential revisions in the event of a potential shortage gap:

- Implementation of additional public outreach, education, and communication programs (in addition to the programs discussed in Chapter 9 of the 2025 UWMP).
- Implementation of more stringent water use restrictions under the standard water shortage levels (discussed in Section 5.4)
- Implementation of stricter enforcement actions and penalties (discussed in Section 7.0)
- Improvements to the water supply augmentation responses (discussed in Section 5.1), as well as any associated operational changes (discussed in Section 5.3) which may be required
- Incorporation of additional actions recommended by City staff or other interested parties

The City will use the monitoring and reporting data to evaluate the ability for these potential revisions to resolve any shortage gaps which may occur within the standard water shortage levels.

This WSCP is adopted as part of the City's 2025 UWMP adoption process discussed in Chapter 10 of the 2025 UWMP and Section 12.0. It is anticipated the City will review, revise, and adopt an updated WSCP as part of preparing its 2025 UWMP as necessary. However, the City will continue to review the monitoring and reporting data, and if needed, update the WSCP more frequently. Any updates to the City's WSCP will include a public hearing and adoption process by the City Council (see Section 12.0).

12.0 Plan Adoption, Submittal, and Availability

The City's WSCP is adopted as part of the City's 2025 UWMP adoption process discussed in Chapter 10. The process for adopting the City's WSCP includes the following:

- The City will conduct a public hearing and make the WSCP available for public inspection.
- The City will provide notification of the time and place of the public hearing to any city or county in which water is provided.
- The City will publish notice of public hearing in a newspaper once a week, for two successive weeks (with at least five days between publication dates).
- The City Council will adopt the 2025 UWMP and the WSCP
- As part of submitting the 2025 UWMP to DWR, the City will also submit the WSCP (electronically through DWR's online submittal tool) within 30 days of adoption and by July 1, 2026. The City will submit a copy of the WSCP to the California State Library and

to any city or county in which water is provided within 30 days of adoption. In addition, the City will make the WSCP available for public review within 30 days of adoption.

If there are any subsequent amendments required, the process of adopting an amended WSCP includes the following:

- The City will conduct a public hearing and make the amended WSCP available for public inspection.
- The City Council will adopt the amended WSCP
- The City will submit the amended WSCP to DWR (electronically through DWR's online submittal tool) within 30 days of adoption

Additional information regarding the adoption, submittal, and availability of the City's WSCP (and 2025 UWMP) is provided in Chapter 10 of the 2025 UWMP.

References

California Geological Survey. (2026). *Fault Activity Map of California*. Retrieved from https://maps.conservation.ca.gov/cgs/fam/App/

California Geological Survey and USGS. (2016). *Earthquake Shaking Potential for California*.

MWD. (2026). *Draft 2025 Urban Water Management Plan.* The Metropolitan Water District of Southern California.

Appendix A

City Ordinance No. 15-0008

ORDINANCE NO. 15-0008

AN ORDINANCE OF THE CITY OF MANHATTAN BEACH AMENDING CHAPTER 7.44 OF THE MANHATTAN BEACH MUNICIPAL CODE REGARDING WATER CONSERVATION

WHEREAS, on January 17, 2014, Governor Edmund G. Brown Jr. declared a state of emergency in California due to severe drought conditions and called on all Californians to reduce water usage by twenty percent.

WHEREAS, on April 25, 2014, Governor Brown issued an executive order finding that the continued drought conditions present urgent challenges and called for additional action to address the impacts of the drought.

WHEREAS, on July 15, 2014, the State Water Resources Control Board adopted emergency water conservation regulations (23 California Code of Regulations Section 865), which require urban water suppliers to implement certain water conservation measures in their water shortage contingency plans, including restrictions on outdoor irrigation.

WHEREAS, on March 17, 2015, the State Water Resources Control Board revised and extended the emergency water conservation regulations.

WHEREAS, on April 1, 2015, Governor Brown issued Executive Order B-29-15 that, among other things, directs the State Water Resources Control to impose restrictions to achieve a statewide 25 percent reduction in potable urban usage through February 2016.

WHEREAS, on May 5, 2015, the State Water Resources Control Board approved revised emergency water conservation regulations in order to implement Executive Order B-29-15.

WHEREAS, the City of Manhattan Beach ("City") is an urban water supplier, as defined in Water Code Section 10617, and is required to comply with the State Water Board's emergency water conservation regulations.

WHEREAS, the City has codified the water conservation measures in its water shortage contingency plan at Chapter 7.44 of the Manhattan Beach Municipal Code.

WHEREAS, the City Council wishes to have authority to implement and fairly enforce the water conservation measures identified in Chapter 7.44 of the Manhattan Beach Municipal Code as necessary to ensure a stable and reliable water supply for residents and businesses and to help the State address the ongoing drought.

THE MANHATTAN BEACH CITY COUNCIL HEREBY ORDAINS AS FOLLOWS:

Section 1. The City Council hereby amends Chapter 7.44 ("Water Conservation") of Title 7 ("Public Works") of the Manhattan Beach Municipal Code in its entirety to read as follows:

"**7.44.010 – General prohibition.**

A. No person shall cause, use, or permit the use of water from the City water system in a manner contrary to any provision of this Chapter.

B. No person shall cause, use, or permit the use of water from the City water system in excess of any limit established by the City Council by resolution.

7.44.020 – Permanent water conservation measures.

The following water conservation requirements shall apply to all persons within the City of Manhattan Beach:

A. Landscape.

1. Watering Hours. No lawn or landscape area shall be spray irrigated between the hours of 9:00 a.m. and 6:00 p.m. on any day. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

2. Irrigation Overspray and Runoff. Water shall not spray or flow to any impermeable private or public surface, including but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.

3. Water Drift. No sprinklers, fountains or other water features shall be operated when winds are so high as to create water drift causing runoff or flow to any impermeable private or public surface, including, but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.

4. Over-Irrigation. It is prohibited to water or irrigate lawns, turf or other landscape beyond saturation causing runoff or flow to any impermeable private or public surface, including, but not limited to, walkways, driveways, sidewalks, alleys, streets, or storm drains.

5. Irrigation During/After a Rain Event. It is prohibited to water or irrigate any landscaping within 48 hours of a one-tenth of an inch (0.10") or greater rainfall event.

B. Cleaning. No person shall:

1. Use water to wash, clean or clear any sidewalks, streets, walkways, patios, driveways, alleys or parking areas, whether paved or unpaved, with a

hose connected to a domestic water source unless through use of a water broom or pressure washer.

2. Wash or clean with water any vehicle, including, but not limited to any automobile, truck, van, bus, motorcycle, boat or trailer, whether motorized or unmotorized, except by use of a hand-held bucket or similar container or a hose equipped with a positive action quick release shutoff valve or nozzle. This subsection shall not apply to any commercial car washing facility which utilizes a recycling system to capture or reuse water.

C. Water Features and Water Recreation Facilities. No person shall:

1. Fill any water feature such as a fountain, pond, lake or water display unless the water feature is constructed with a water recirculation system.

2. Fill any water recreation facility such as a hot tub, spa, permanent swimming or wading pool unless the water recreation facility is constructed, installed or equipped with a cover to reduce water loss due to evaporation.

D. Waste, Ponding and Leaks. No person shall:

1. Cause, permit or allow water to leak from any exterior or interior pipe, hose or plumbing fixture of any kind whatsoever.

2. Cause, permit or allow water to flow from any source on private or public property into gutters, streets, alleys or storm drains, except as a result of rainfall or excessive groundwater from a private sump pump or from a nonpotable source of water.

3. Cause, permit or allow water from any source to pond on private or public property, except as a result of rainfall.

4. Cause, permit or allow water to flow from any source on private or public property without beneficial use.

E. Eating and Drinking Establishments.

1. All eating and drinking establishments of any kind whatsoever including, but not limited to, any restaurant, hotel, cafe, cafeteria, bar or club, whether public or private, shall only provide drinking water to any person upon receipt of an express request.

2. All food service businesses shall install water conserving pre-rinse nozzles.

F. Hotels, Motels, Bed and Breakfast.

1. All hotels, motels and bed and breakfast establishments shall provide customers the option of choosing not to have towels laundered daily. Each establishment shall prominently display notice of this option in each bathroom and sleeping room using clear easily understood language.

2. All guest room toilets shall be low flow toilets utilizing the best available technology at the time of installation.

G. Carwashes. All carwash systems shall use water recirculation systems.

H. Commercial Establishments in General.

1. All nonresidential buildings in the City shall maintain:

a. Public toilets and urinals with best available technology low flow toilets and urinals.

b. Water efficient dishwashers.

2. Water efficient washing machines shall be installed upon replacement of existing or acquisition of new washing machines in nonresidential buildings.

I. Hoses. No person shall allow water to flow freely from a hose that is not equipped with a positive action quick release shutoff valve or nozzle.

J. Landscape Irrigation – 1.) New Construction - Irrigation with potable water outside of newly constructed homes and buildings shall be delivered by drip or microspray irrigation systems for irrigation projects submitted for City review on July 1, 2015 or after; 2.) New Landscape Irrigation – Irrigation with potable water of new landscape, not associated with new construction, shall be delivered by drip or microspray irrigation systems for irrigation projects submitted for City review on July 1, 2015 or after.

K. Exceptions. The provisions of this section are not applicable to the uses of water that are necessary to protect public health and safety or for essential services, such as police, fire, and other similar emergency services. The provisions of this section also do not apply to non-potable water, such as recycled or reclaimed water.

7.44.030 – Drought restrictions.

In addition to the permanent water restrictions set forth in Section 7.44.020, the City Council may impose the following restrictions after a public hearing, notice of which shall be published not less than 10 days before the hearing in a newspaper of general circulation within the City:

A. Stage 1 Water Shortage. Upon declaration of a Stage 1 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Landscape irrigation using potable water shall be limited to no more than 15 minutes per watering zone per watering day.

2. Landscape watering with potable water shall be limited to three times per week between:

a. 6:00 p.m. on Monday and 9:00 a.m. the following Tuesday;

b. 6:00 p.m. on Wednesday and 9:00 a.m. the following Thursday; and

c. 6:00 p.m. on Saturday and 9:00 a.m. the following Sunday.

3. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

B. Stage 2 Water Shortage. Upon declaration of a Stage 2 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. No landscape watering with potable water unless a timed sprinkler system is installed or watering is done with a handheld device.

2. Landscape watering with potable water shall be limited to two times per week for not more than 15 minutes per watering zone from:

a. 6:00 p.m. on Wednesday and 9:00 a.m. the following Thursday; and

b. 6:00 p.m. on Saturday and 9:00 a.m. the following Sunday.

3. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

C. Stage 3 Water Shortage. Upon declaration of a Stage 3 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.

2. Landscape watering with potable water shall be limited to one time per week for not more than 15 minutes per watering zone as follows:

a. Even numbered addresses from 6:00 p.m. on Wednesday to 9:00 a.m. the following Thursday; and

b. Odd numbered addresses from 6:00 p.m. on Friday to 9:00 a.m. the following Saturday.

3. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

D. Stage 4 Water Shortage. Upon declaration of a Stage 4 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.

2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.

3. Watering of nonpublic playing fields with potable water is prohibited.

4. Landscape watering with potable water shall be limited to one time per week only by drip irrigation, hand held hoses, or if reclaimed water is utilized as permitted by law as follows:

a. Even numbered addresses from 6:00 p.m. on Wednesday to 9:00 a.m. the following Thursday, and

b. Odd numbered addresses from 6:00 p.m. on Friday to 9:00 a.m. the following Saturday.

5. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

E. Stage 5 Water Shortage or Above. Upon declaration of a Stage 5 Water Shortage, the following restrictions shall apply to the use of water from the City's water system:

1. Washing of vehicles is prohibited, except at commercial car washes or by mobile high pressure/low volume commercial services.

2. Home reverse osmosis treatment units and water softeners shall be disconnected or turned off.

3. Filling of residential swimming pools or spas with potable water is prohibited.

4. Landscape irrigation with potable water is prohibited, except with a watering can using water captured from indoor use.

5. Any additional water conservation measures adopted by the Director of Public Works or his or her designee deemed necessary for the preservation of public health, safety, and welfare.

6. This subsection shall not apply to any drip irrigation system, irrigation system maintenance, leak repair or new planting of low water usage plants or if reclaimed water is utilized as permitted by law.

F. Exceptions. The provisions of this section are not applicable to the uses of water that are necessary to protect public health and safety or for essential services, such as police, fire, and other similar emergency services. The provisions of this section also do not apply to non-potable water, such as recycled or reclaimed water.

7.44.040 – Penalties.

A. The city prosecutor, any peace officer or city code enforcement officer shall have the authority to enforce the provisions of this chapter.

B. Notice of First Violation. The City shall issue a written notice to a violator of a first violation and provide the violator with a period of seven days to correct the violation.

C. A failure to timely correct a first violation and all subsequent violations of this Chapter shall constitute an infraction and may, at the City's discretion, be punishable by a fine of not more than One Hundred ($100.00) Dollars for a first violation, a fine of not more than Two Hundred ($200.00) Dollars for a second violation of the same provision of this chapter within one year, or a fine of not more than Five Hundred ($500.00) Dollars for each additional violation of the same provision of this chapter within one year. Any offense that would otherwise constitute an infraction shall be deemed a misdemeanor if a defendant has been convicted of two or more prior violations of this Chapter within the 12-month period immediately preceding the commission of the offense. Each day that a violation occurs shall constitute a separate offense.

D. Punishment under this chapter shall not preclude punishment pursuant to any provision of state law pertaining to water conservation or any other remedies, penalties or procedures provided by law.

7.44.050 – Relief from compliance.

A. Within 20 days after the date of a first notice of violation, a person may file an application for relief from any provision of this Chapter. The City Manager or his or her designee shall grant, conditionally grant, or deny the application.

B. In determining whether to grant relief and the nature of any relief, the City Manager or his or her designee shall take into consideration all relevant factors including, but not limited to, the following:

1. Water uses during construction; and

2. Adjustments to water use caused by emergency health or safety hazards.

7.44.060 – Conflict of Laws.

The provisions of this Chapter are intended to supplement and be in addition to any other adopted building code or regulation contained in Title 9 of this Code. In the event of a conflict, the provisions of Title 9 shall prevail over the provisions of this Chapter."

Section 2. CEQA Finding. The City Council hereby finds that it can be seen with certainty that there is no possibility that the adoption of this Ordinance will have a significant effect on the environment. It is, therefore, exempt from California Environmental Quality Act review pursuant to Section 15061(b)(3) of the CEQA Guidelines (California Code of Regulations, Title 14, §§ 15000 *et seq*.). In addition, this Ordinance is exempt under CEQA Guidelines Sections 15307 and 15308 because the Ordinance amends the City's water conservation regulations in a manner that would protect natural resources and the environment.

Section 3. If any part of this Ordinance or the application thereof to any person or circumstances is for any reason held invalid by a court of competent jurisdiction, the validity of the remainder of this Ordinance or the application of such provision to other persons or circumstances shall not be affected.

Section 4. The City Clerk shall certify to the passage and adoption of this Ordinance and shall cause this Ordinance to be published within 15 days after its passage, in accordance with Section 36933 of the Government Code.

Section 5. This Ordinance shall go into effect and be in full force and effect at 12:01 a.m. on the 31st day after its passage.

PASSED, APPROVED AND ADOPTED this _____ of _____, 2015.

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
WAYNE POWELL
Mayor

ATTEST:

_____
LIZA TAMURA
City Clerk

APPROVED AS TO FORM:

_____
QUINN M. BARROW
City Attorney

Appendix B

City of Manhattan Beach Local Hazard Mitigation Plan

The City of Manhattan Beach's 2024 Local Hazard Mitigation Plan can be accessed online at: https://www.manhattanbeach.gov/departments/fire-department/local-hazard-mitigation-plan

Appendix C

2025 County of Los Angeles All-Hazards Mitigation Plan

The County of Los Angeles All-Hazards Mitigation Plan can be accessed online at: https://ceo.lacounty.gov/wp-content/uploads/2025/10/Final-2025-LA-County-AHMP-Base-Plan-Signed.pdf

Appendix D Delta Reliance

D

Appendix D – Demonstration of Reduced Imported Water Reliance

Demonstration of Consistency With the Delta Plan for Participants In Covered Actions

(CY 2015 Through Cy 2050)

City Of Manhattan Beach

Introduction

Pursuant to the California Department of Water Resources (DWR), an urban water supplier that anticipates participating in or receiving water from a proposed project (or "covered action") such as a multi-year water transfer, conveyance facility, or new diversion that involves transferring water through, exporting water from, or using water in the Sacramento-San Joaquin Delta (Delta) should provide information in their 2015 and 2020 Urban Water Management Plans (UWMPs) for use in demonstrating consistency with Delta Plan Policy WR P1, "Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance". In addition, pursuant to California Code of Regulations, Title 23, § 5003:

> *(c)(1) Water suppliers that have done all of 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 City of Manhattan Beach (City) is sub-agency of the West Basin Municipal Water District (WBMWD), which in turn is a member agency of the Metropolitan Water District of

Southern California (MWD). As noted in MWD's document entitled "Infeasibility of Accounting Supplies from the Delta Watershed for Metropolitan's Member Agencies and their Customers" (which is included in MWD's Regional 2025 UWMP and is provided as Attachment 1),

> *"…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."*

In addition, MWD's 2025 Regional UWMP indicates:

> *"…in accordance with UMWP requirements, Metropolitan's member agencies and their customers (many of them, retail agencies) also report demands and supplies for their service areas in their respective UWMPs. The data reported by those agencies are not additive to the regional totals shown in Metropolitan's UWMP; rather, their reporting represents subtotals of the regional total and should be considered as such for the purposes of determining reduced reliance on the Delta…While the demands that Metropolitan's member agencies and their customers report in their UWMPs are a good reflection of the demands in their respective service areas, they do not adequately represent each water supplier's contributions to reduced reliance on the Delta. In order to calculate and report their reliance on water supplies from the Delta watershed, water suppliers that receive water from the Delta through other regional or wholesale water suppliers would need to determine the amount of Delta water that they receive from the regional or wholesale supplier. Two specific pieces of information are needed to accomplish this: first is the quantity of demands on the regional or wholesale water supplier that accurately reflect a supplier's contributions to reduced reliance on the Delta, and second is the quantity of a supplier's demands on the regional or wholesale water supplier that are met by supplies from the Delta watershed…For water suppliers that make investments in regional projects or programs it may be infeasible to quantify their demands on the regional or wholesale water supplier in a way that accurately reflects their individual contributions to reduced reliance on the Delta."*

Nonetheless, the City has taken proactive measures to help reduce regional reliance on imported water supplies and is discussed in the following sections.

Reduced Reliance Calculation Tables

Pursuant to DWR guidance, Tables C-1 through C-4 were prepared to show the potential reduction of reliance on imported supply for the City. The City has used these tables to demonstrate its reduced regional reliance on imported water supplies, but not specifically Delta Watershed supplies. For each of the tables, a "Baseline year" was selected. Water demands during subsequent years (from 2015 through 2050 in five-year increments) were compared to water demands during the Baseline year. Table C-1 considers the population and service area water demands, and a demand in gallons per capita per day (GPCD) water use rate was calculated for each of the years following the Baseline year. The calculated reduction in GPCD from the Baseline year was then translated to an estimated amount of water saved as a result of water conservation measures. Table C-2 references the estimated amount of water saved from Table C-1 and shows the City's water demand without water use efficiency in effect.

A method of showing reduced regional reliance on imported water supplies is to show increased regional self-reliance. Table C-3 lists water supply sources that contribute to regional self-reliance, including water use efficiency (from Table C-1 and C-2) and groundwater recharge activities. Regional self-reliance is expressed both in terms of acre feet (AF) and as a percentage.

The calculation of reduced regional reliance on imported water supplies is shown on Table C-4. Table C-4 also shows the percent change in imported water supplies relative to the City's total supply. A negative percent change of imported water supplies indicates the City has reduced regional reliance on imported water supplies.

Since the Baseline year, the City has decreased its reduced regional reliance on imported water supplies in 2015, 2020, and anticipates doing so through 2045.

The City has reduced its reliance on imported water supply in up to two separate categories, as follows:

- The demand in GPCD for the "Baseline year" was compared to the GPCDs in subsequent years (from 2015 through 2050, in five-year increments). The reduced GPCD multiplied by the population in these subsequent years is indicative of the potential reduced regional reliance on imported water supplies and is included in Table C-1.
- The recycled water use from 2015 through 2050, in five-year increments, also demonstrates reduced regional reliance on imported water supplies and included in Table C-1

These categories of reduced imported water reliance are discussed below. The sum of the increased regional self-reliance and the sum of the reduced regional reliance imported water demand resulting from these categories is reflected on Table C-3 and Table C-4, respectively, and is reflective of the City's overall reduced reliance.

Reduced GPCD

Section 6.2.2 of the City's 2025 UWMP describes the management of the West Coast Basin. The City produces groundwater from the West Coast Basin, which is adjudicated and managed by the Water Replenishment District of Southern California (WRD). In addition, the City purchases treated imported water from WBMWD which is ultimately provided by the Metropolitan Water District of Southern California.

Chapter 9 of the 2025 UWMP describes the Demand Management Measures which the City has implemented to reduce the amount water used by its customers. In addition,

Section 6.2.2 of the 2025 UWMP describes the groundwater basin management measures implemented by WRD. Collectively these actions translate to a reduction in the GPCD usage rate which is described further in Chapter 5 of the 2025 UWMP. These actions directly impact total water demands, and consequently, the quantity of imported water which may be required. Absent the proactive measures taken by the City, it is anticipated there may have been a greater demand on imported water.

Pursuant to DWR guidance, reduced reliance on imported water supplies can be demonstrated by first selecting a "Baseline" water demand, represented by total potable water demands during CY 2008. Table C-1 summarizes the "Baseline" water usage by the City in CY 2008 (assuming demand reduction efforts had not been implemented); actual water usage in 2015, 2020, and 2025; and projected water usage through 2050 in five- year increments. Table C-2 demonstrates that, but for the water conservation efforts implemented by the City, there may have been a greater reliance on untreated imported water supplies during the Baseline year as compared to subsequent years. The reduction is considered the reduced imported water reliance.

The City's potable water demand of 6,509 AF during CY 2008, along with the corresponding service area population of approximately 34,750, were used to determine the Baseline GPCD. Subsequently, the actual demands for CY 2015, CY 2020, and CY 2025 were compared to the calculated population to obtain the recent GPCD which includes the water conservations measures which have been implemented (those demand management measures are described in Chapter 9 of the 2020 UWMP). The "Water Supplies Contributing to Regional Self-Reliance" are also provided in Table C-1. The differences between the Baseline GPCD and the 2015, 2020, and 2025 GPCDs are

effectively considered a demonstration of the reduced regional reliance on imported water supplies with the understanding that any potential increased demand by the City resulting from increased population could have been required, absent the City's new water supplies which contribute to self-reliance. A similar methodology is used for the projected potable water demands (2025 UWMP Table 4-3) and populations (2025 UWMP Table 3-2).

Recycled Water Use

The City has also constructed infrastructure to deliver recycled water to its customers instead of continuing to use its potable water supplies. The historical recycled water demands for CY 2015, CY 2020, and CY 2025, along with the projected recycled water demands (from 2025 UWMP Table 4-3) are incorporated in Table C-1. These quantities are in addition to the reduced demand resulting from decreased GPCD.

Metropolitan Water District of Southern California

In addition, as the wholesale provider, the Metropolitan Water District of Southern California has included a detailed discussion regarding measurable reduction in Delta reliance in Appendix 11 of its 2025 Regional Urban Water Management Plan. That discussion is included by reference and also included in Attachment 1 of this Plan.

Appendix D – Demonstration of Reduced Imported Water Reliance

Table C-1: Optional Calculation of Water Use Efficiency -To be completed if Water Supplier does not specifically estimate Water Use Efficiency as a supply

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	6,509	4,878	5,107	5,450	4,681	4,809	4,925	4,902	4,879
Non-Potable Water Demands	272	262	250	275	311	312	313	314	315
Potable Service Area Demands with Water Use Efficiency Accounted For	6,237	4,616	4,857	5,175	4,992	5,121	5,238	5,216	5,194

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Population	34,750	35,454	35,031	34,051	35,568	37,086	38,603	38,603	38,603

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Per Capita Water Use (GPCD)	160	116	124	136	125	123	121	121	120
Change in Per Capita Water Use from Baseline (GPCD)		(44)	(36)	(25)	(35)	(37)	(39)	(40)	(40)
Estimated Water Use Efficiency Since Baseline		1,747	1,430	937	1,392	1,535	1,691	1,713	1,735

Table C-2: Calculation of Service Area Water Demands Without Water Use Efficiency

Total Service Area Water Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	6,509	4,878	5,107	5,450	4,681	4,809	4,925	4,902	4,879
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline		1,747	1,430	937	1,392	1,535	1,691	1,713	1,735
Service Area Water Demands without Water Use Efficiency Accounted For	6,509	6,625	6,537	6,387	6,073	6,344	6,616	6,615	6,614

Appendix D – Demonstration of Reduced Imported Water Reliance

Table C-3: Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Use Efficiency	-	1,747	1,430	937	1,392	1,535	1,691	1,713	1,735
Water Recycling	272	262	250	275	311	311	311	311	311
Stormwater Capture and Use									
Advanced Water Technologies									
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	272	2,009	1,680	1,212	1,703	1,846	2,002	2,024	2,046

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	6,509	6,625	6,537	6,387	6,073	6,344	6,616	6,615	6,614

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies Contributing to Regional Self-Reliance	272	2,009	1,680	1,212	1,703	1,846	2,002	2,024	2,046
Change in Water Supplies Contributing to Regional Self-Reliance		1,737	1,408	940	1,431	1,574	1,730	1,752	1,774

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	4.2%	30.3%	25.7%	19.0%	28.0%	29.1%	30.3%	30.6%	30.9%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		26.1%	21.5%	14.8%	23.9%	24.9%	26.1%	26.4%	26.8%

Appendix D – Demonstration of Reduced Imported Water Reliance

Table C-4: Calculation of 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 (Optional)
CVP/SWP Contract Supplies									
Delta/Delta Tributary Diversions									
Transfers and Exchanges									
Other Water Supplies from the Delta Watershed	5,395	2,805	4,778	4,175	3,550	3,679	3,796	3,774	3,752
Total Water Supplies from the Delta Watershed	5,395	2,805	4,778	4,175	3,550	3,679	3,796	3,774	3,752

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	6,509	6,625	6,537	6,387	6,073	6,344	6,616	6,615	6,614

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045	2050 (Optional)
Water Supplies from the Delta Watershed	5,395	2,805	4,778	4,175	3,550	3,679	3,796	3,774	3,752
Change in Water Supplies from the Delta Watershed		(2,590)	(617)	(1,220)	(1,845)	(1,716)	(1,599)	(1,621)	(1,643)

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 (Optional)
Percent of Water Supplies from the Delta Watershed	82.9%	42.3%	73.1%	65.4%	58.5%	58.0%	57.4%	57.1%	56.7%
Change in Percent of Water Supplies from the Delta Watershed		-40.5%	-9.8%	-17.5%	-24.4%	-24.9%	-25.5%	-25.8%	-26.2%

Appendix D – Demonstration of Reduced Imported Water Reliance

Reliance on Water Supplies from the Delta Watershed (Metropolitan 2025 UWMP Table A.10-3; DWR UWMP Table C-4)

Table A.10-3
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%**

Source: MWD Final Draft 2025 UWMP, Appendix 10 - Metropolitan's Reduced Delta Reliance Reporting (December 2025)

APPENDIX D

ATTACHMENT 1

Infeasibility of Accounting Supplies from the Delta Watershed for Metropolitan's Member Agencies and their Customers

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. Consistent with Metropolitan's 2025 Urban Water Management Plan (UWMP), reduced reliance on supplies from the Delta watershed is evaluated at the regional level through changes in regional self-reliance and total reliance on Delta supplies. 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.

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 provided approximately 15 percent of the fiscal year 2024 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's 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's 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.

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

[1] A standby charge is collected from properties within the service areas of 22 of Metropolitan's 26 member agencies, ranging from $5 to $15 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. Standby charges represented approximately 2 percent of Metropolitan's total revenues in Fiscal Year 2025/26. *See Metropolitan Water District of Southern California, Water Standby Charge for Fiscal Year 2025/26, Board Materials (as presented May 13, 2025 and incorporated in subsequent budget materials, including November 2025 revision), and Metropolitan Water District of Southern California, Water Revenue Bonds Official Statement, Appendix A – "The Metropolitan Water District of Southern California."*

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.

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 programs have continued to evolve in response to ongoing drought conditions in the Colorado River Basin and associated shortage and contingency actions. 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.

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).

Metropolitan's Live Oak and Garvey Reservoirs serve exclusively as regulating facilities and have a combined capacity of approximately 4,100 AF. The remaining reservoirs are primarily used to meet emergency, drought, and seasonal demands, with a total gross storage capacity of 1,760,200 AF. However, not all of this capacity is available to Metropolitan; accounting for dead storage and volumes allocated to other entities, Metropolitan's effective storage capacity is approximately 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 1 lists the groundwater conjunctive use programs active in the region.

Table 1: Contractual Conjunctive Groundwater Projects

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**	**38.0**	**76.9**

* Metropolitan's active Conjunctive Use Programs as of July 1, 2025.

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.

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 130,000 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 a permanent On-site Retrofit Program (ORP). This program encompassed lessons learned from the Pilot Program and feedback from member agencies to make the program more streamlined and improve its efficiency. With an annual budget of $3 million, as of fiscal year 2024/25 the program has funded 550 sites, replacing 15,360 acre-feet of potable water with recycled water 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 2025, Metropolitan provided about $5 million for production of 40,000 acre-feet of recycled water for non-potable and indirect potable uses. Metropolitan provided about $8 million to support projects that produced about 53,000 acre-feet of recovered groundwater for municipal use. Since 1982, Metropolitan has invested $771 million to fund 90 recycled water projects and 28 groundwater recovery projects that have produced a cumulative total of about 4.6 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 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.

Metropolitan's Credits Program investment in fiscal year 2025 was $22 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 $976 million in conservation rebates that have resulted in a cumulative savings of 4.32 million acre-feet of water as of fiscal year 2025. These investments include $414 million in turf removal which resulted in 175 million square feet of lawn turf removed. During fiscal year 2025, 1.12 million 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.

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.

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Appendix E Notifications

E

CITY OF MANHATTAN BEACH PUBLIC WORKS
3621 Bell Avenue, Manhattan Beach, CA 90266

E.J. Caldwell
West Basin Municipal Water District
17140 S. Avalon Blvd
Carson, CA 90745

March 12, 2026

RE: Retailer 2025 Urban Water Management Plan and Water Shortage Contingency Plan Updates

Dear E.J. Caldwell,

The City of Manhattan Beach is in the process of preparing its 2025 Urban Water Management Plan (UWMP) and 2025 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. The UWMP is a planning document that details how the City will reliably meet existing and future customer demands. The WSCP outlines an approach for shortages and identifies appropriate response actions in droughts or emergencies. Together, the UWMP and WSCP provide customers, businesses, and partner agencies with a clear framework that supports reliable service, drought preparedness, and resilient operations.

Water Code section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area at least 60 days prior to holding a public hearing. The City anticipates releasing a draft UWMP and WSCP in April 2026, followed by a public hearing as part of a City Council meeting on June, 16 2026, at 6:00 PM. This letter serves as the City of Manhattan Beach's official public hearing notice and intent to adopt the 2025 UWMP and WSCP before the July 1, 2026 deadline.

A copy of the City of Manhattan Beach's draft 2025 UWMP and WSCP will be available for public review on the City of Manhattan Beach's website https://www.manhattanbeach.gov/departments/environmental-sustainability/water-conservation. Your agency is invited to submit comments and provide input on the UWMP and WSCP. If you have any questions, comments, or input, please contact Jeffrey Page, Utilities Manager, via email at jpage@manhattanbeach.gov or by phone at (310) 802-5320.

Sincerely,

Jeffrey Page
Utilities Manager
City of Manhattan Beach

CITY OF MANHATTAN BEACH PUBLIC WORKS
3621 Bell Avenue, Manhattan Beach, CA 90266

Ralph Felix
California Water Service
2632 W. 237th St.
Torrance. CA 90505

March 12, 2026

RE: Retailer 2025 Urban Water Management Plan and Water Shortage Contingency Plan Updates

Dear Ralph Felix,

The City of Manhattan Beach is in the process of preparing its 2025 Urban Water Management Plan (UWMP) and 2025 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. The UWMP is a planning document that details how the City will reliably meet existing and future customer demands. The WSCP outlines an approach for shortages and identifies appropriate response actions in droughts or emergencies. Together, the UWMP and WSCP provide customers, businesses, and partner agencies with a clear framework that supports reliable service, drought preparedness, and resilient operations.

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Sincerely,

Jeffrey Page
Utilities Manager
City of Manhattan Beach

CITY OF MANHATTAN BEACH PUBLIC WORKS
3621 Bell Avenue, Manhattan Beach, CA 90266

Mark Pestrella
Los Angeles County Water Resourcs Division
900 S. Fremont Ave.
Alhambra, CA 91803

March 12, 2026

RE: Retailer 2025 Urban Water Management Plan and Water Shortage Contingency Plan Updates

Dear Mark Pestrella,

The City of Manhattan Beach is in the process of preparing its 2025 Urban Water Management Plan (UWMP) and 2025 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. The UWMP is a planning document that details how the City will reliably meet existing and future customer demands. The WSCP outlines an approach for shortages and identifies appropriate response actions in droughts or emergencies. Together, the UWMP and WSCP provide customers, businesses, and partner agencies with a clear framework that supports reliable service, drought preparedness, and resilient operations.

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Sincerely,

Jeffrey Page
Utilities Manager
City of Manhattan Beach

CITY OF MANHATTAN BEACH PUBLIC WORKS
3621 Bell Avenue, Manhattan Beach, CA 90266

Elias Sasoon
El Segundo Public Works Department
500 Main Street
El Segundo, CA 90245

March 12, 2026

RE: Retailer 2025 Urban Water Management Plan and Water Shortage Contingency Plan Updates

Dear Elias Sasoon,

The City of Manhattan Beach is in the process of preparing its 2025 Urban Water Management Plan (UWMP) and 2025 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. The UWMP is a planning document that details how the City will reliably meet existing and future customer demands. The WSCP outlines an approach for shortages and identifies appropriate response actions in droughts or emergencies. Together, the UWMP and WSCP provide customers, businesses, and partner agencies with a clear framework that supports reliable service, drought preparedness, and resilient operations.

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Sincerely,

Jeffrey Page
Utilities Manager
City of Manhattan Beach

CITY OF MANHATTAN BEACH PUBLIC WORKS
3621 Bell Avenue, Manhattan Beach, CA 90266

Stephan Tucker
Water Replenishment District
4040 Paramount Blvd.
Lakewood. CA 90712

March 12, 2026

RE: Retailer 2025 Urban Water Management Plan and Water Shortage Contingency Plan Updates

Dear Stephan Tucker,

The City of Manhattan Beach is in the process of preparing its 2025 Urban Water Management Plan (UWMP) and 2025 Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. The UWMP is a planning document that details how the City will reliably meet existing and future customer demands. The WSCP outlines an approach for shortages and identifies appropriate response actions in droughts or emergencies. Together, the UWMP and WSCP provide customers, businesses, and partner agencies with a clear framework that supports reliable service, drought preparedness, and resilient operations.

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Sincerely,

Jeffrey Page
Utilities Manager
City of Manhattan Beach

Appendix F Adopted Resolutions

F