

City of Manhattan Beach

ADOPTION OF 2020 URBAN WATER MANAGEMENT PLAN AND WATER SHORTAGE CONTINGENCY PLAN

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ENGINEERS INC.



2020 Urban Water Management Plan

- **Urban Water Management Planning Act (1983)**
 - Long Range Water Resource Planning Document to Ensure Adequate Water Supplies to meet Existing and Future Water Demands
 - Urban Water Supplier Defined as “...a supplier either publicly or privately owned, providing water to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually”
 - Urban Water Supplier to Update its UWMP Every 5 years
 - Required by DWR to Receive State Grants and/or Loans



2020 Urban Water Management Plan Newer Requirements

- Drought Risk Assessment (assuming dry years from 2021-2025)
- Perform more stringent Water Supply Reliability Assessment, assuming droughts of longer duration
- Enhanced Water Shortage Contingency Plan
- Reporting of Annual Water Loss Data
- Seismic Risk Assessment
- Energy Intensity Analysis (kWh per AF)
- Demonstrated Reduced Imported Water Reliance



Components of the UWMP

- Water Use & Supply Characterization
- Water Service Reliability and Drought Risk Assessment
- Demonstrated Reduced Imported Water Reliance
- SB X7-7 Baseline and Targets
- Water Shortage Contingency Plan
- Demand Management Measures



Key Findings of UWMP

- **Water Use & Supply Characterization**
 - The City primary relies on groundwater from the West Coast Basin and purchased imported water from West Basin Municipal Water District.
 - Recycled water is provided through West Basin Municipal Water District.
 - Water Sources are Managed and Reliable
 - Water Replenishment District of Southern California
 - West Basin Municipal Water District
 - The City has Flexibility to Manage Supply Sources under Drought Conditions



Key Findings of UWMP

- **Water Service Reliability and Drought Risk Assessment**
 - The City's water supplies are reliable in meeting demands during existing and projected normal, single dry, and five consecutive year drought periods through 2045
 - Drought Risk Assessment based on a five consecutive year drought from 2021 through 2025 and available historical supplies
 - Annual Assessment due beginning on July 1, 2022
 - Review of the City's unconstrained water demands (prior to any Water Shortage Contingency Plan response actions)
 - Provides information regarding anticipated shortages, shortage response actions, and communication regarding the Water Shortage Contingency Plan



Key Findings of UWMP

- **Demonstrated Reduced Imported Water Reliance**

- The percentage of imported water supplies relative to the City's total supply for the "Baseline year" was compared to the percentages in subsequent years (from 2020 through 2045, in five-year increments).
- Recycled water use (including potential use for groundwater replenishment) also demonstrates reduced regional reliance on imported water supplies.

• 2008 Use (Baseline)	160 GPCD
• 2020 Use	124 GPCD
• 2045 Use (Projected):	130 GPCD



Key Findings of UWMP

- **SB X7-7 2020 Water Use Target Compliance**
 - 2020 Water Use Target (SB X7-7): 144 GPCD
 - 2020 Actual City Water Use: 124 GPCD
- The City of Manhattan Beach is in compliance with the 2020 Water Use Target.

SB X7-7 Table 9: 2020 Compliance							
Actual 2020 GPCD ¹	Optional Adjustments to 2020 GPCD					2020 Confirmed Target GPCD ^{1, 2}	Did Supplier Achieve Targeted Reduction for 2020?
	Enter "0" if Adjustment Not Used			TOTAL Adjustments ¹	Adjusted 2020 GPCD ¹ <i>(Adjusted if applicable)</i>		
	Extraordinary Events ¹	Weather Normalization ¹	Economic Adjustment ¹				
124	-	-	-	-	124	144	YES
¹ All values are reported in GPCD							
² 2020 Confirmed Target GPCD is taken from the Supplier's SB X7-7 Verification Form Table SB X7-7, 7-F.							
NOTES:							



Water Shortage Contingency Plan

- Water Shortage Contingency Plan
 - Urban Water Suppliers (including the City) are Required to Prepare and Adopt
 - Included as Chapter 8 of the City's 2020 Urban Water Management Plan
 - May also be Used as a Stand-alone Document
 - To Be Implemented During Drought Conditions to Initiate:
 - Potential Water Supply Augmentation Measures
 - Customer Demand Reduction Measures



Water Shortage Contingency Plan (cont.)

- The City's Water Shortage Contingency Plan is Correlated to DWR's Six Standard Water Shortage Levels Corresponding to Progressive Demand Reduction Measures Ranging from up to 10, 20, 30, 40, 50, and Greater than 50 Percent.

Established Level	Supply Condition/Shortage	2020 Standard Level	Shortage Level
1	5%	1	≤ to 10%
2	10%	2	10 to 20%
3	15%	3	20 to 30%
4	20%	4	30 to 40 %
5	25-50%	5	40 to 50 %
		6	> 50 %



Water Shortage Contingency Plan (cont.)

- Incorporates
 - Existing Demand Management Measures
 - Existing Emergency Response Plan
 - Existing Seismic Risk Assessment and Mitigation Plan
- Conclusion: The City will be Able to Meet Water Demands Under Drought Conditions Using Existing Water Supplies Coupled With Customer Demand Reduction Measures



UWMP Conclusions

- City is compliant with its 2020 Water Use Target goal pursuant to SB X7-7
- Water supplies are reliable in meeting demands during existing and projected normal, single dry, and five consecutive year drought periods through 2045
- With its current demand management measures, the City anticipates having sufficient water supply to meet population growth estimated in the City's Water Master Plan and by the Southern California Association of Governments

