2020

CITY OF MORRO BAY

URBAN WATER MANAGEMENT PLAN

FINAL | OCTOBER 2021

WSC

2020 Urban Water Management Plan

OCTOBER 2021

Prepared by Water Systems Consulting, Inc.

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Acronyms & Abbreviations

°C	Degrees Celsius
°F	Degrees Fahrenheit
AB	Assembly Bill
AF	Acre Foot
AFY	Acre Feet per Year
AWWA	American Water Works Association
BWRO	Brackish Water Reverse Osmosis
CCWA	Central Coast Water Authority
Census	United States Census Bureau
CEQA	California Environmental Quality Act
CFS	Cubic Feet per Second
CIMIS	California Irrigation Management Irrigation System
City	City of Morro Bay
CSD	Community Service District
CWC	California Water Code
DDW	SWRCB Division of Drinking Water
Delta	Sacramento-San Joaquin Delta
DMM	Demand Management Measure
DRA	Drought Risk Assessment
DSC	Delta Stewardship Council
DWR	California Department of Water Resources
EIR	Environmental Impact Report
EPA	United States Environmental Protection Agency
ETo	Evapotranspiration
FMP	Facility Master Plan
GPCD	Gallons per Capita per Day
GPM	Gallons per Minute
IPR	Indirect Potable Reuse
ITP	Independent Technical Panel
kWh	Kilowatt Hour
MFR	Multi-family Residential
MG	Million Gallons
MGD	Million Gallons per Day
MWR	Master Water Report

NPDES	National Pollutant Discharge Elimination System
R-GPCD	Residential Gallons per Capita per Day
RHNA	Regional Housing Needs Assessment
RI-GPCD	Residential Indoor Gallons per Capita per Day
RO	Reverse Osmosis
SBX7-7	Senate Bill 7 of Special Extended Session 7
SFR	Single Family Residential
SLOCFCWD	San Luis Obispo County Flood Control and Water Conservation District
SLOCOG	San Luis Obispo Council of Governments
SLO County	San Luis Obispo County
State Board	State Water Resources Control Board
SWP	State Water Project
SWRCB	State Water Resources Control Board
TDS	Total Dissolved Solids
UF	Ultrafiltration
UV AOP	Ultraviolet Advanced Oxidation Process
UWMP	Urban Water Management Plan
UWMP Act	Urban Water Management Planning Act
WPA	Water Planning Area
WRF	Water Reclamation Facility
WSCP	Water Shortage Contingency Plan
WTP	Water Treatment Plant
WUE	Water Use Efficiency
WWTP	Wastewater Treatment Plant

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URBAN WATER MANAGEMENT PLAN

Introduction and Lay Description

This chapter provides a brief overview of the City of Morro Bay (City) and the purpose of this 2020 Urban Water Management Plan (UWMP). It also describes how the UWMP is organized and how it relates to other local and regional planning efforts that the City is involved in.

This document presents the 2020 Urban Water Management Plan (UWMP) for the City of Morro Bay (City) service area. The City was incorporated in 1964 and served an estimated 10,757 people in its service area in 2020. The service area of the water system generally corresponds to the City boundary and is approximately five square miles. The City also serves about eight residences outside the City limits in the Chorro Valley. The City Public Works Department manages the potable water and wastewater systems. Currently, the City does not provide recycled water to customers.

IN THIS SECTION

- About the City
- Purpose of the UWMP
- UWMP Organization
- Relationship to other documents and initiatives

The mission of the City Public Works Department is to enhance the quality of life for its residents by developing and maintaining the City's infrastructure in a safe and environmentally sensitive manner. To that end, the City Public Works Department operates a retail water distribution system to provide the citizens with a source of safe and reliable drinking water. Maintaining a reliable and safe drinking water supply is a significant effort for the City which requires continual planning and upkeep as the resources and technologies available change.

1.1 Urban Water Management Plan Purpose and Overview

In 1983, the State of California Legislature (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 AFY, to adopt an UWMP every five years demonstrating water supply reliability under normal as well as drought conditions. The UWMP Act applies to wholesale and retail suppliers.

Since the original UWMP Act was passed, it has undergone significant expansion, particularly since the City's previous UWMP was prepared in 2015. Prolonged droughts, groundwater overdraft, regulatory revisions, and changing climatic conditions affect the reliability of each water supplier as well as the statewide water reliability overseen by California Department of Water Resources (DWR), the State Water Resources Control Board (State Board), and the Legislature. Accordingly, the UWMP Act has grown to address changing conditions and 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 an 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 in the CWC. Suppliers prepare their own UWMPs in accordance with the requirements and submit them to DWR. DWR then reviews the plans to make sure they have addressed the requirements identified in the CWC and submits a report to the Legislature summarizing the status of the plans for each five-year cycle.

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, continue to promote conservation programs and policies, ensure that sufficient water supplies are available for future beneficial use, and provide a mechanism for response during drought conditions or other water supply shortages.

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

- Provides a standardized methodology for water utilities to assess their water resource needs and availability.
- Serves as a resource to the community and other interested parties regarding water supply and demand, conservation and other water related information.
- Provides 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.
- Informs other regional water planning efforts.

CWC Section 10632 also includes updated 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. In the 2015 UWMP cycle, the WSCP was part of the UWMP. For the 2020 UWMP, the WSCP is a standalone document so that it can be updated independently of the UWMP but must be referenced in and attached to the 2020 UWMP. An overview of the WSCP is described in the body of this UWMP and the standalone WSCP is attached as **Appendix G**.

1.2 UWMP Organization

This UWMP was prepared in compliance with the CWC and generally followed DWR's recommended organizational outline. New requirements to include lay descriptions are accounted for in this section and at the beginning of each chapter.

Below is a summary of the information included in the UWMP:

Chapter 1 – Introduction.

This chapter provides background information on the UWMP process, new regulatory requirements, and an overview of the information covered throughout the remaining chapters. The UWMP was prepared to maintain compliance with CWC and DWR requirements. The City will maintain eligibility for DWR and other grants with submission of the UWMP, subject to final review and approval by DWR.

Chapter 2 – UWMP Preparation & Adoption.

This chapter provides information on the processes used for developing the UWMP, including efforts in coordination and outreach. The UWMP was prepared to efficiently coordinate water supply planning and management efforts in the region. The UWMP was also prepared in a transparent manner and various stakeholders were engaged to seek and distribute relevant information. All public noticing was conducted as outlined by DWR's Guidebook to Assist Water Suppliers in the Preparation of a 2020 Urban Water Management Plan (2020 UWMP Guidebook).

Chapter 3 – System Description.

This chapter describes the City's water systems, service areas, population demographics, climate, and land uses. The City service area generally corresponds to the City boundary and is approximately five square miles. In addition, the City serves eight residences outside the City limits in the Chorro Valley. The water system primarily includes a mix of residential and commercial customers with only one industrial customer.

Chapter 4 – Water Use Characterization.

This chapter describes and quantifies the current and projected water uses through 2045 within the water service area of the City by customer category. In 2020, residential customers accounted for 90% of the accounts in the service area.

Chapter 5 – SBX7-7 Baseline and Targets.

This chapter describes the Water Conservation Act of 2009, also known as SBX7-7, Baseline, Targets, and 2020 Compliance. The calculated gallons per capita per day (GPCD) for 2020 is 90 GPCD, which meets the City's 2020 SBX7-7 target of 116 GPCD.

Chapter 6 – Water Supply Characterization.

This chapter describes and quantifies the current and projected potable and non-potable water supplies for the City. Water sources are characterized with information needed to manage water resources, assess supply reliability, perform the Drought Risk Assessment (DRA), and prepare and implement the WSCP. The City anticipates meeting customer demands through 2045.

Chapter 7 – Water Service Reliability and Drought Risk Assessment.

This chapter describes the City's water supply reliability during normal, single dry, and multiple dry water years through 2045. A DRA for the next five years is also included. The water service reliability assessment and 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.

Chapter 8 – Water Shortage Contingency Plan.

This chapter includes a summary of the standalone WSCP which is a detailed plan for how the City will identify and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply is reduced to a level that cannot support demand at any given time or when reduction in demand is required for various reasons. The City's WSCP is included as **Appendix G** and is a standalone document that can be amended separately as needed.

Chapter 9 – Demand Management Measures.

This chapter describes the City's efforts to promote conservation and reduce water demand, including discussions of specific demand management measures. The City actively promotes public awareness and education about its water supply source and the public's role in conserving water and protecting shared resources. The City is committed to implementing cost effective programs that will increase water efficiency throughout the service area.

Chapter 10 – Adoption, Submittal, and Implementation.

This chapter discusses the steps taken by the City to hold a public hearing, adopt, and submit the 2020 UWMP and WSCP. In addition, this chapter discusses implementation of the adopted UWMP and required actions to amend the UWMP as necessary. All public noticing, UWMP adoption, and UWMP submittal requirements were conducted as outlined by DWR's 2020 Guidebook.

1.3 UWMP in Relation to Other Efforts

The City coordinated with multiple neighboring and stakeholder agencies to prepare this UWMP. The coordination efforts were conducted to 1) inform the agencies of the City's activities; 2) gather high quality data for use in developing this UWMP; and 3) coordinate planning activities with other related regional plans and initiatives.

In addition to the 2020 UWMP, the City is involved in several other internal and external planning efforts and collaborates with a variety of stakeholders to achieve coordination and consistency between various planning documents locally and regionally. The City completed the OneWater Morro Bay Plan (OneWater Plan) in October 2018, which updated previous master plans, conducted an analysis of the City's water supplies, identified capacity deficiencies in the water, sanitary sewer, and storm drainage systems in order to develop alternatives to correct deficiencies and to plan for infrastructure that will serve future development through the year 2040. The City also completed the Plan Morro Bay document in May 2021 which is the City's General Plan and Local Coastal Program (LCP) Land Use Plan (LUP). This document represents the culmination of an extensive public outreach and involvement process, analysis by an advisory committee, commissions, City staff, elected officials, and the community to establish the City's vision through 2040. Past and current planning efforts by the City have been considered and incorporated into the UWMP.

The City is also implementing the "Our Water" program which is an effort to plan and build water and wastewater infrastructure for the City's sustainable future. The City of Morro Bay Water Reclamation Facility (WRF) Program will replace the City's existing wastewater treatment plant with an advanced water purification facility that will meet state regulations, protect the environment, and contribute a safe and reliable water source for the City. The project includes construction of a new one million gallon per day (MGD) advanced treatment facility, two new lift stations, approximately 3.5 miles of pipelines and wells to inject the purified water into the groundwater aquifer, which can be extracted for reuse through the City's existing infrastructure. Construction of the WRF began in 2020 and project completion is anticipated by 2023. Recycled water from the WRF will be an important asset to the City's future water supply portfolio upon completion. Additional information regarding the Our Water program and plans to implement recycled water as a supplemental supply source through indirect potable reuse (IPR) is provided in **Chapter 6** and **Chapter 7**.

1.4 UWMPs and Grant or Loan Eligibility

In order for a water supplier to be eligible for a grant or loan administered by DWR, the supplier must have a current UWMP on file that meets the requirements set forth by the Water Code. A current UWMP must also be maintained by the supplier throughout the term of any grants or loans received. The City has prepared the 2020 UWMP under guidance from DWR's 2020 UWMP Guidebook.

1.5 Demonstration of Consistency with the Delta Plan for Participants in Covered Actions

The Delta Plan is a comprehensive, long-term, legally enforceable plan guiding how federal, state, and local agencies manage the Sacramento-San Joaquin Delta's (Delta's) water and environmental resources. The Delta Plan was adopted in 2013 by the Delta Stewardship Council (DSC). Delta Plan Policy WR P1 identifies UWMPs as the tool to demonstrate consistency with state policy to reduce reliance on the Delta for a Supplier that carries out or takes part in a covered action. A covered action may include activities 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 Delta. As a supplier that receives imported water from the Delta through its wholesale supplier, the City is required to submit information as outlined in **Appendix C** of the DWR 2020 UWMP Guidebook.

To document and quantify supplies contributing to reduced reliance on the Delta watershed and improved regional self-reliance a number of steps must be taken, which include.

- Setting a Baseline
- Change in Delivery of Delta Water
- UWMP WR P1 Consistency Reporting

DWR does not review this analysis as part of the UWMP approval process; therefore, this information is attached as **Appendix F**.

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URBAN WATER MANAGEMENT PLAN

Plan Preparation

This chapter of the UWMP provides information on the processes used for developing the UWMP, including efforts in coordination and outreach.

This Plan was prepared following guidance from DWR's 2020 UWMP Guidebook, DWR UWMP Public Workshops and Webinars, Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (SB7 Guidebook) (Resources, February 2016), and the 2020 DWR Review Sheet Checklist (Appendix A).

The 2020 UWMP was prepared in a transparent manner and the City actively engaged stakeholders and the public to both seek and distribute water use, supply, and reliability information to strengthen the regions' ability to assess and plan for the region's water future. Details regarding the City's UWMP preparation and the coordination and outreach efforts conducted are provided in this chapter.

IN THIS SECTION

2.1 Plan Preparation

The City prepared this 2020 UWMP in accordance with CWC Section 10617, which requires water supplier with 3,000 or more service connections, or those supplying 3,000 AFY or more to prepare an UWMP. Suppliers are required to update UWMPs at least once every five years on or before July 1, in years ending in six and one, incorporating updated and new information from the five years preceding each update. The City has included all requisite data in the development of this 2020 UWMP.

2.2 Basis for Preparing a Plan

The City is preparing an individual UWMP and is not a member of a Regional UWMP or Regional Alliance. The City served an estimated 10,757 people in its service area, through 5,491 metered connections, and supplied 1,090 AFY of potable water in 2020 to customers. Throughout this Plan, water volume is represented in units of acre-feet (AF), unless otherwise noted, and data is presented on a calendar year basis. Required DWR tables presenting this information are provided in **Table 2-1, Table 2-2**, and **Table 2-3.**

Table 2-1. DWR 2-1R Public Water Systems

PUBLIC WATER SYSTEM NUMBER	PUBLIC WATER SYSTEM NAME	NUMBER OF MUNICIPAL CONNECTIONS 2020	VOLUME OF WATER SUPPLIED 2020 (AFY)
CA4010011	City of Morro Bay	5,491	1,090
	TOTAL	**5,491**	**1,090**

Table 2-2. DWR 2-2 Plan Identification

TYPE OF PLAN	MEMBER OF RUWMP	MEMBER OF REGIONAL ALLIANCE	NAME OF RUWMP OR REGIONAL ALLIANCE
Individual UWMP	No	No	NA

Table 2-3. DWR 2-3 Agency Identification

TYPE OF SUPPLIER	YEAR TYPE	UNIT TYPE
Retailer	Calendar Years	Acre-Feet (AF)

2.3 Coordination and Outreach

The City coordinated with San Luis Obispo County (SLO County) and other stakeholder agencies to prepare the 2020 UWMP. The coordinated efforts were conducted to 1) inform the agencies of the City's efforts and activities; 2) gather high quality data for use in developing this UWMP; and 3) coordinate planning activities with other related regional plans and initiatives.

CWC Section 10621(b) and Delta Plan Policy WR P1 requires that Suppliers notify cities and counties to which they serve water that the UWMP, WSCP, and reduced reliance on the Delta watershed documentation are being updated and reviewed. The CWC specifies that this must be done at least 60 days prior to the public hearing. To fulfill this requirement, the City sent letters of notification of preparation of the 2020 UWMP, WSCP, and reduced reliance on the Delta watershed documentation to

San Luis Obispo County 60 days prior to the public hearing. Notifications were also sent to the Central Coast Water Authority (CCWA) and San Luis Obispo Council of Governments (SLOCOG). Copies of the 60-day notification letters are attached as Appendix B. In addition, the City exchanged supply and demand information with San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWD) and maintained communication throughout development of the 2020 UWMP as SLOCFCWD provides State Water Project (SWP) water to the City (**Table 2-4**).

Table 2-4. DWR 2-4 Water Supplier Information Exchange

WHOLESALE WATER SUPPLIER NAME
San Luis Obispo County Flood Control and Water Conservation District

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URBAN WATER MANAGEMENT PLAN

System Description

This chapter describes the City's water system, service area, population demographics, local climate, and land uses.

The City of Morro Bay is located along the central coast of California in San Luis Obispo County; along Highway 1 approximately 12 miles north of the city of San Luis Obispo. The City was incorporated in 1964 and is governed by a five-member City Council. The Public Works Department manages the potable water and wastewater systems. The 5 square mile water and wastewater system service area generally corresponds to the City Limits with the exception of eight residences located outside the City limits in the Chorro Valley. The water system primarily includes a mix of residential and commercial customers with only a small portion of industrial customers.

IN THIS SECTION

3.1 General Description & Service Area Boundary Map

The City's water system includes approximately 72 miles of active water distribution pipelines, ten treated water storage tanks, three booster pump stations, four pressure reducing valve stations, 7 active wells, and six pressure zones. Water is provided to a mix of residential and commercial customers with only a small portion of industrial customers. A graphical illustration of the City's service area is provided as **Figure 3-1**. There have been no significant changes to the City's service area since the 2010 and 2015 UWMPs were prepared. The Morro Bay Power Plant was included within the City's service area in 2014 but since that time the plant has received little to no water from the City and does not have an associated residential population.

View of city from the bay

A description of the City's wastewater service area is discussed in **Section 6.2.5**.

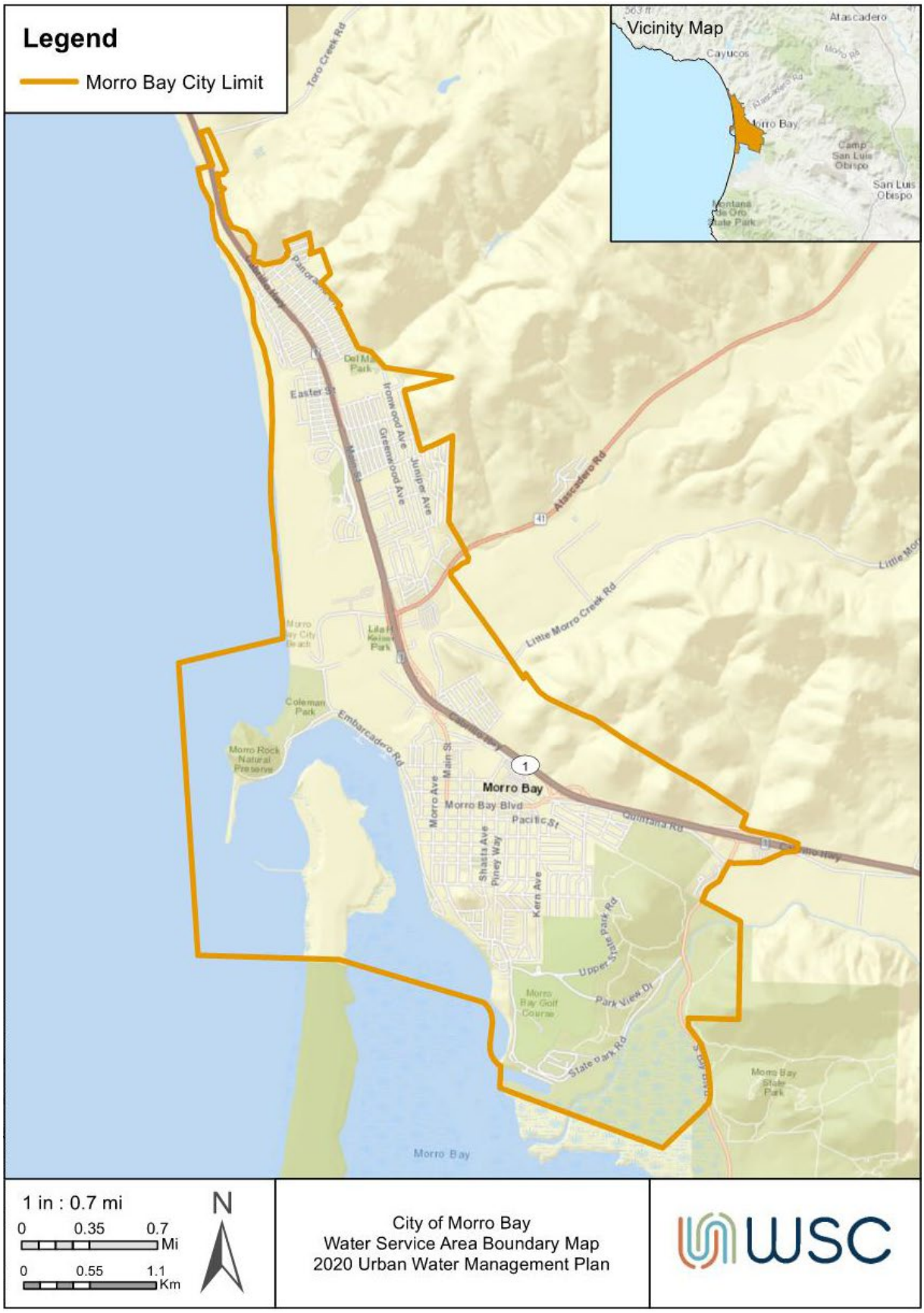
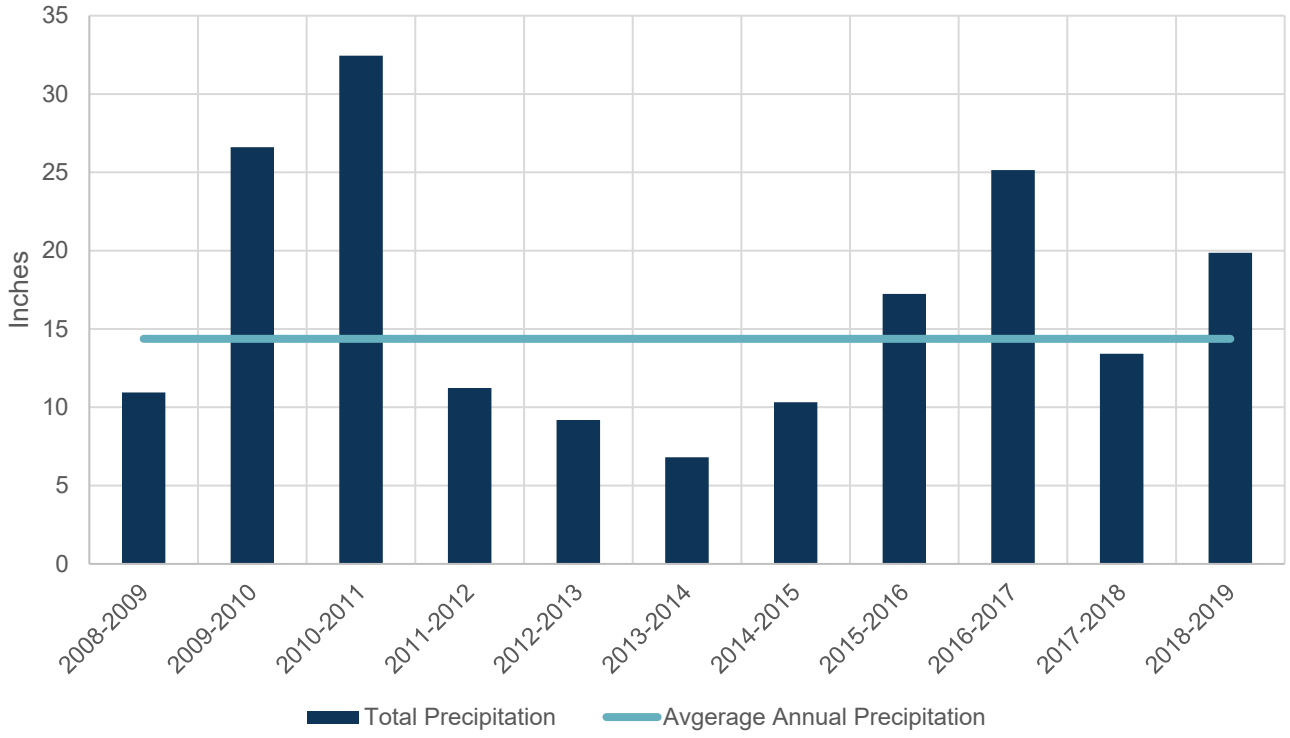


Figure 3-1. City of Morro Bay Water Service Area

3.2 Service Area Climate

The City's service area has a dry, sub-tropical, climate that is heavily influenced by its proximity to the Pacific Ocean. Ocean breezes keep temperatures cool in the summer and warmer in the winter. Climate data from the California Irrigation Management Information System (CIMIS) collected from Station #160 San Luis Obispo West from January 2005 to December 2020, was evaluated for evapotranspiration (ETo), and temperature data (CIMIS, 2021). Precipitation data was obtained from the San Luis Obispo County Public Works rain recording station (Canet #747) for water years beginning 2007-2008 and ending 2019-2020 (San Luis Obispo County Public Works, 2021). The area benefits from a relatively low evapotranspiration rate when compared to inland areas due to its location being along the coast. The area also has a Mediterranean rainfall pattern with rains typically occurring from December through March. The total annual precipitation as provided by Canet station #747 is 14.37 inches, with average monthly precipitation ranging from 0.02 to 4.10 inches. The peak summertime irrigation period combined with seasonal tourism results in maximum daily water demands occurring during the summer. The majority of rainfall occurs in the winter months, with December and January having the highest average rainfall. **Figure 3-2** shows the annual precipitation for water years 2008-2009 through 2018-2019 and illustrates which years fall above or below the annual average precipitation for this period. **Table 3-1** shows the monthly averages for precipitation, ETo, and temperature.

Climate change and the potential impacts within the City's service area are discussed in **Chapter 4**, climate change considerations.



Note: Precipitation data was not available for the month of November during water year 2016-2017.

Figure 3-2. Annual Precipitation Data for Water Years 2008-2009 Through 2018-2019 (San Luis Obispo County Public Works, 2021)

Table 3-1. City of Morro Bay Climate Data

MONTH	AVERAGE PRECIPITATION (INCHES)[1]	AVERAGE ET_o (INCHES)[2]	AVERAGE AIR TEMP (°F)[2]
January	4.10	2.6	55.8
February	2.81	2.7	54.6
March	2.48	3.8	56.1
April	0.68	4.6	58.0
May	0.22	5.2	59.9
June	0.11	5.3	62.9
July	0.22	5.9	66.5
August	0.02	5.5	66.5
September	0.10	4.4	65.2
October	1.09	3.7	63.1
November	0.89	2.7	58.4
December	2.84	2.3	54.0
ANNUAL AVERAGE	**14.37**	**48.6**	**60.1**

Notes:

1 Data from San Luis Obispo County Public Works Canet Station #747 for water years beginning 2007-2008 and ending 2019-2020 (San Luis Obispo County Public Works, 2021)

2 Data from CIMIS weather station #160 San Luis Obispo West; https://cimis.water.ca.gov/. Averages calculated from 2005-2020 data (CIMIS, 2021).

3.3 Service Area Population and Demographics

The City provided water to an estimated 10,757 people in 2020. The coastal mountain ranges limit the development extents of the City Service area. In addition, future growth in the City is limited by Measure F, a voter-approved growth management ordinance that limits the city to 12,200 residents. Population growth estimates are anticipated to be slow and stable. A summary of the population and demographics for the City is provided in the following sections.

3.3.1 Service Area Population

2020 U.S. Census data was used for determining the City's 2020 service area population (U.S. Census Bureau, Accessed August 1, 2021). Population projections and annual growth rates for 2025-2040 were aligned with those from the OneWater Morro Bay Plan and Plan Morro Bay documents, which assume a buildout population of 12,149 in 2040 (Carollo, October 2018). The San Luis Obispo Council of Governments (SLOCOG) also estimates growth throughout the region and identified an estimated 2045 population of 12,169 for the City, published in SLOCOG's 2050 Regional Growth Forecast for San Luis Obispo County (Beacon Economics & SLOCOG Staff, June 2017). The SLOCOG 2045 population estimate was used for this UWMP. Current and estimated population projections for the service area through the year 2045 are provided in **Table 3-2.**

Table 3-2. DWR 3-1R Current and Projected Population

POPULATION SERVED	2020	2025	2030	2035	2040	2045
Morro Bay	10,757	11,213	11,525	11,837	12,149	12,169

Sources:
2020: 2020 U.S. Census, https://www.census.gov/quickfacts/morrobaycitycalifornia
2025-240: OneWater Morro Bay Plan and Plan Morro Bay
2045: San Luis Obispo Council of Governments 2050 Regional Growth Forecast for San Luis Obispo County

3.3.2 Other Social, Economic, and Demographic Factors

Based on 2015-2019 data, the United States Census Bureau (Census) estimates that there was a total of 6,386 housing units in the City of Morro Bay. Of these housing units, 70.8 percent were single-family houses, 19.5 percent of the housing units were located in multi-unit structures, 8.0 percent were mobile homes with the remaining housing units classified as "other". The average household size was 2.13 people with 17.5 percent of all households having one or more people under the age of 18 and 47.7 percent of all households having one or more people 65 years and over. Approximately 48% of households are composed of married or cohabitating couples. The median age of a resident within the City is approximately 50.8 years old (United States Census Bureau, n.d.).

Morro Bay is a multigenerational community with a large number of residents over 65. With the substantial elderly population, the community's percentage of seniors is nearly double the state average. By comparison, the community has a relatively smaller share of youth. Despite this imbalance, the working age population has remained constant to support the local economy and community needs (City of Morro Bay, May 2021).

According to the U.S. Census Bureau, the 2019 median household income (MHI) for the City is $68,262, the level of poverty is 11.0% of the population, and 4.1% of households received SNAP (Supplemental Nutrition Assistance Program) from 2015 to 2019. Of the people of the City of Morro Bay that identify as one race alone, 88.4% were White, 1.3% were Black or African American, 1.2% were Native American, 3.6% were Asian, and 2.3% were some other race. Approximately 3.3% identified as two or more races. Of the total population, an estimated 80.2% identified as White non-Hispanic and 11.2% as Hispanic. The U.S. Census Bureau clarifies that people of Hispanic origin may be of any race (United States Census Bureau, n.d.). Tourism is a key economic factor for Morro Bay and the City does experience increased water demand during the main tourism season, primarily in the months of July, August, and September. Population changes associated with tourism are temporary and vary from year to year. As such, population changes due to tourism are not captured in census data and populations used in this UWMP. Increased water demands associated with tourism are accounted for in the yearly water demands described in **Chapter 4**.

3.4 Land Uses within Service Area

Almost half of the City's land is designated as part of the Morro Bay State Park and State Beach. An additional 18% of the land use is dedicated to other types of parks and open spaces. Single family homes make up 14% of the land use within the City whereas multi-family homes make up less than 1%. With combined agricultural use representing 6.25% of land uses and just over 1% of land undeveloped, any new population growth will likely require increased redevelopment in key areas or annexation of new land (City of Morro Bay, May 2021). **Figure 3-3** shows the land use by customer type in the City.

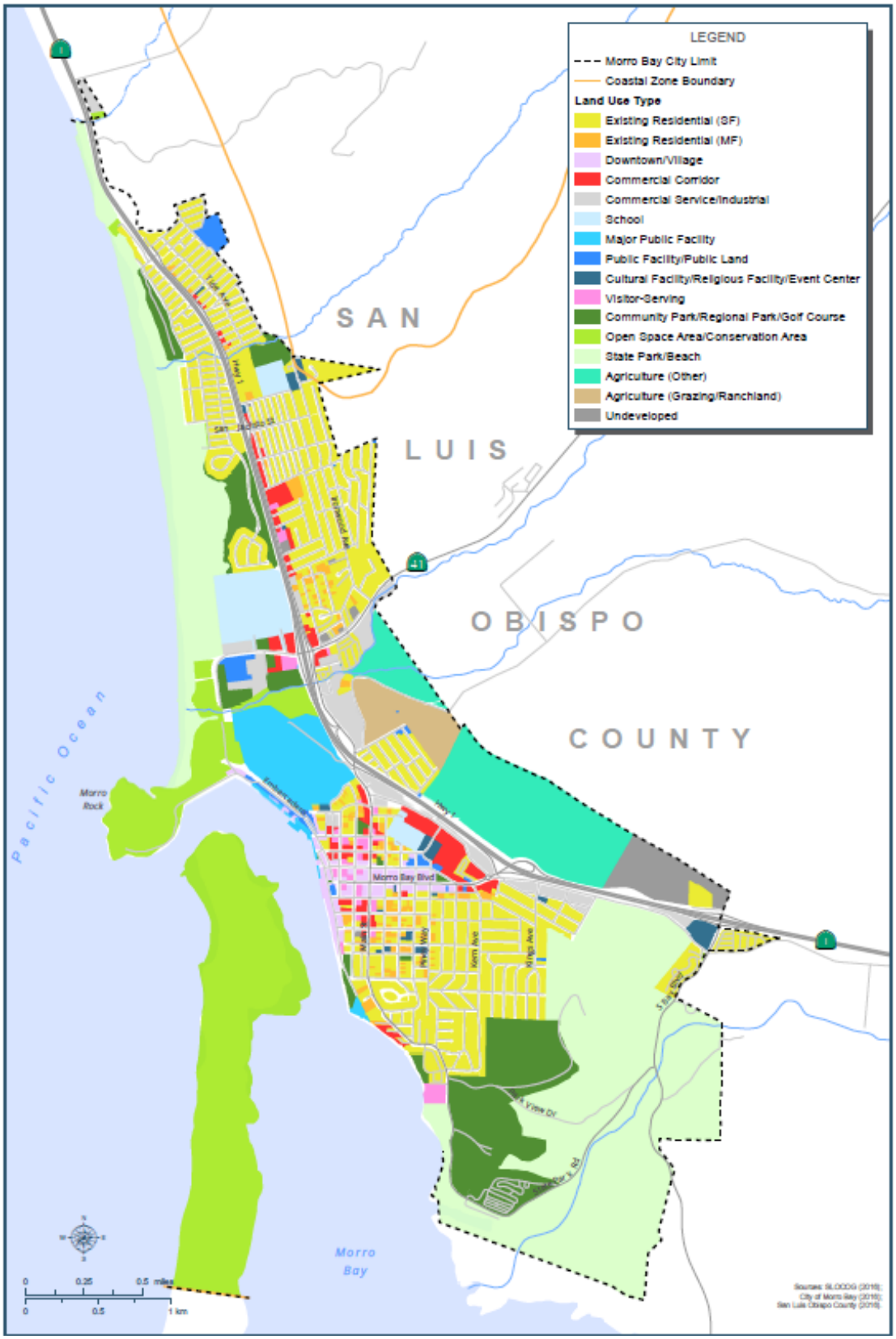


Figure 3-3. City of Morro Bay Land Use Zoning Map (City of Morro Bay, May 2021)

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URBAN WATER MANAGEMENT PLAN

Water Use Characterization

This chapter describes and quantifies the City's past, current, and projected water uses through 2045. The City provides potable water to all its customers, which are comprised of about 90% residential, 7% commercial, 1% institutional/governmental, and 2% landscaping accounts.

Accurately tracking and reporting current water demands allows the City to properly analyze the use of their resources in order to conduct robust resource planning. Estimating future demand as accurately as possible allows the City to appropriately plan for infrastructure investments to manage its water supply and reliably serve the land uses and population identified in the City's General Plan called Plan Morro Bay. Evaluation of future growth and related water demand, aligned with Plan Morro Bay, provides essential information for developing demand projections to meet the City's build-out goals. Projected demands are expected to range from approximately 1,333 AFY in 2025 to 1,445 AFY in 2045.

IN THIS SECTION

- Non-Potable vs. Potable Water Use
- Past, Current, and Projected Use
- Projected Water Demand for Lower Income Households
- Climate Change Impacts

4.1 Non-Potable Versus Potable Water Use

To provide clarity between potable and recycled water sources, these water sources have been discussed in separate sections of this document. A detailed description of recycled water is provided in **Section 6.2.5**.

A summary of both potable and recycled water demands has been provided in **Table 4-5**.

4.2 Past, Current, and Projected Water Use by Sector

Current system demands are summarized, by sector, in **Table 4-1**. Projected demands are based on using a Gallons Per Capita Per Day (GCPD) factor applied to future population estimates.

4.2.1 Water Use Sectors Listed in Water Code

Water suppliers are required to identify water uses, to the extent that records are available, for at least each of the 10 water use sectors identified in CWC Section 10631(d) to assist in the water demand projections. Potential recycled water uses are described in **Chapter 6**.

The City serves the following potable water uses:

Single-Family Residential (SFR): SFR customers are typically on a lot with a free-standing building containing one dwelling unit and the dwelling unit may include either an attached or detached secondary dwelling. Condominiums are included within the SFR use type. The City services 8 SFR customers outside City limits.

Multi-Family Residential (MFR): MFR customers are typically multiple dwelling units within one building or several buildings within one complex. The City includes mobile home residences under this use type.

Commercial: Commercial customers typically provide or distribute a product or service.

Institutional/Governmental: Institutional and governmental water customers are typically public services, such as higher-education institutions, schools, courts, churches, hospitals, government facilities, and nonprofit research institutions.

Industrial: Industrial customers typically manufacture or process materials. The City has only one industrial customer which is the power plant.

Landscape: For the purposes of this UWMP, the City considers water use for landscape irrigation, vacant land, and City parks as landscape.

Losses: Distribution system water losses are the water losses from the point of entry to the distribution system to the delivery point at the customer's system. Water losses are discussed in Section 4.2.3.

4.2.2 Past and Current Water Use

The City serves potable water for a variety of uses, as summarized in **Table 4-1**. The City has been consistently reducing its water use since the implementation of water conservation programs during the drought ending in the early 1990s. More recently, water use over the past five years has notably reduced from the pre-drought levels prior to 2013. Over the last five years, the City used an average of 1,057 AFY. The most recent peak in demand occurred in 2013 with a total demand of 1,246 AFY. In 2020, 90% of the total water accounts, 72% of the total water deliveries (excluding non-revenue water) and 64% of water deliveries (including non-revenue water) were to residential customers. **Figure 4-1**

shows the percentage of water used by each customer class in 2020 and **Table 4-1** shows the annual volume of water used by each customer class for 2020.

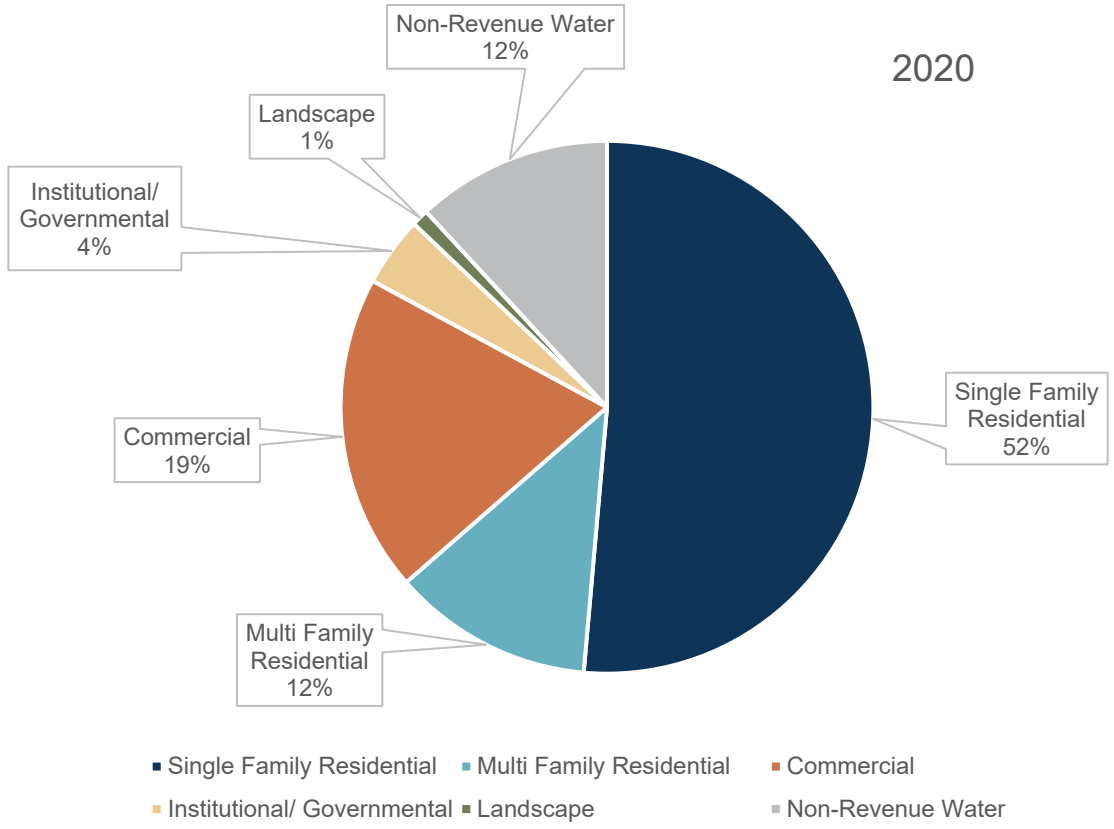

Figure 4-1. 2020 Percentage of Water Use by Customer Class

Table 4-1. DWR 4-1R Actual Demands for Water (AFY)

USE TYPE WHEN DELIVERED	LEVEL OF TREATMENT WHEN DELIVERED	2020 VOLUME
Single-Family Residential	Drinking Water	560
Multi-Family Residential	Drinking Water	133
Commercial	Drinking Water	210
Institutional/Governmental	Drinking Water	46
Industrial	Drinking Water	<1
Landscape	Drinking Water	11
Losses	Drinking Water	129
	TOTAL	**1,090**

4.2.3 Distribution System Losses

System water losses occur as a result of leaks and ruptures in the existing distribution network, system flushing and cleaning, data errors, theft, uncalibrated meters, or pump pressure relief at wells. Addressing water losses can increase water supplies and recover revenue. **Section 9.1.5** discusses the City's programs to assess and manage distribution system real loss.

Over the last five years, the City water losses have ranged from 17 AFY to 129 AFY as shown in **Table 4-2** and **Table 4-3**. The increasing volume of water loss is most likely due to a combination of factors, especially inaccuracies in the supply volume of SWP water provided to the City. The City now receives "True Up" SWP water delivery values which are provided by the County of San Luis Obispo and reflects adjusted values that are synced with the DWR meter. The City may not receive the "True Up" values up to a year later. The City now has a meter installed to monitor SWP water deliveries and will have a better understanding of actual SWP water deliveries which will assist with understanding water losses in the water distribution system.

CWC Section 10631 (d)(3)(C) requires water suppliers to provide data to determine if the supplier will meet its State Board water loss performance standard. Although the standard has not yet been implemented, the data needs to be included the 2020 UWMP. Compliance with the future water loss performance standards will be completed in the next UWMP cycle.

Detailed assessments of water loss were completed since 2015 using American Water Works Association (AWWA) Water Audit Software and are provided in **Appendix D** and are summarized in **Table 4-3**.

Table 4-2. 2016-2020 Water Losses

	2020
Losses, AFY	129
Percentage of Losses	11.9%

Table 4-3. DWR 4-4R 12 Month Water Loss Audit Reporting

REPORT PERIOD START DATE		VOLUME OF WATER LOSS (AFY)[1]
MM	YYYY	
01	2016	17
01	2017	25
01	2018	42
01	2019	103
	2020 [2]	Not Available

[1] Taken from the field "Water Losses" (a combination of apparent losses and real losses) from the AWWA worksheet.

[2] The 2020 AWWA report was not available in time for this UWMP

4.2.4 Projected Water Use

Demands were estimated using a Gallons Per Capita Per Day (GCPD) method. The total demand was estimated by multiplying selected GPCD factors by the projected populations for 2025, 2030, 2035, 2040, and 2045. It is important to note that this method is used for the UWMP as a water supply planning tool that shows how the City can provide supply to meet the potential growth identified in Plan

Morro Bay, which is the basis for growth management. It is also important to note that there are different GPCD terms that can be easily confused. GPCD is different than residential GPCD (R-GPCD), which accounts only for the residential portion of usage, and residential indoor (RI) GPCD (RI-GPCD), which only accounts for the residential indoor portion of total water use. The GPCD method used in this UWMP represents total city water usage including non-residential and residential uses attributed to the total residential population as a proxy for water usage patterns assuming residential and non-residential usage will change in alignment with changes in residential population and water usage. The GPCD method is a high-level demand projection method used for water resources planning purposes and does not consider individual development projects or peak usage resulting from changes in tourism. Projected populations are described in **Chapter 3**. **Table 4-6** and **Table 4-9** present projected demands through 2045. Demand projections are consistent with projections from the OneWater Morro Bay Plan (Carollo, October 2018) and Plan Morro Bay (City of Morro Bay, 2021).

While the 2020 GPCD was below the SBX7-7 target and water use trends have consistently been on the decline since the early 1990's, demand projections are based on the same assumption from the OneWater Morro Bay Plan of future average per capita demand of approximately 106 GPCD. 106 GPCD was the average demand from 2010-2014, thus assuming a future "rebound" to pre-drought usage patterns by 2025 and over the planning horizon of this UWMP. This is consistent with the 2020 UWMP Guidebook's recommendation to consider *unconstrained demand* as the expected water use, which represents water use without drought conditions or any water supply and demand restrictions. As described in the OneWater Morro Bay Plan, "this is likely a conservative assumption because per capita water demand is expected to decrease in the future due to increased conservation measures and more water efficient construction associated with new development. Because the purpose of the OneWater Morro Bay Plan is to size infrastructure needs for the distribution system, it is appropriate to include a level of conservatism when planning future transmission, distribution, and storage needs" (Carollo, October 2018).

The City also considered a rebound to the SBX7-7 2020 target usage of 116 GPCD, which represents an even more conservatively high "unconstrained demand" rebound to usage experienced in 2005 and 2006. Per capita usage has steadily trended downward since 2006, which is assumed to be due to suppressed demand from the economic Great Recession and subsequent drought years. While demands have been constrained since 2006, it is not realistic to assume that demand will rebound to 2006 levels considering changes in customer usage behaviors and permanent conservation measure implementation that have contributed to permanent reductions in water use. Therefore, the OneWater Morro Bay Plan demand projection using the 2010-2014 average GPCD is a more realistic "unconstrained demand" because it accounts for permanently reduced usage patterns. The OneWater Morro Bay Plan demands include a rebound to unconstrained, pre-drought usage patterns while accounting for permanent conservation savings achieved through the Great Recession and drought. The City is also aware that future water use efficiency standards are under development by DWR, which will supersede SBX7-7 standards, and will likely require demands to be lower than the 2020 SBX7-7 target.

The State has proposed standards for residential indoor use, measured as RI-GPCD, which reduces from 55 RI-GPCD in 2020 to 47 RI-GPCD in 2025 and 42 RI-GPCD in 2030. RI-GPCD is only one component of the forthcoming Urban Water Use Objectives that are still under development. As such, a rough demand estimate scenario assuming a future DWR water use efficiency standard of 42 RI-GPCD by 2030 is shown in **Figure 4-2** and **Figure 4-3.**

This UWMP assumes that demands will be consistent with OneWater Morro Bay Plan projections as shown in **Table 4-4** for conservative supply planning purposes. In recognition that water demand could be potentially lower than existing demand to comply with forthcoming water use efficiency standards, the City plans to continue implementing water use efficiency measures and encouraging reductions in water use to meet future water use standards and to enhance resiliency for drought and other water shortage conditions as described in **Chapters 7**, **8**, and **9**.

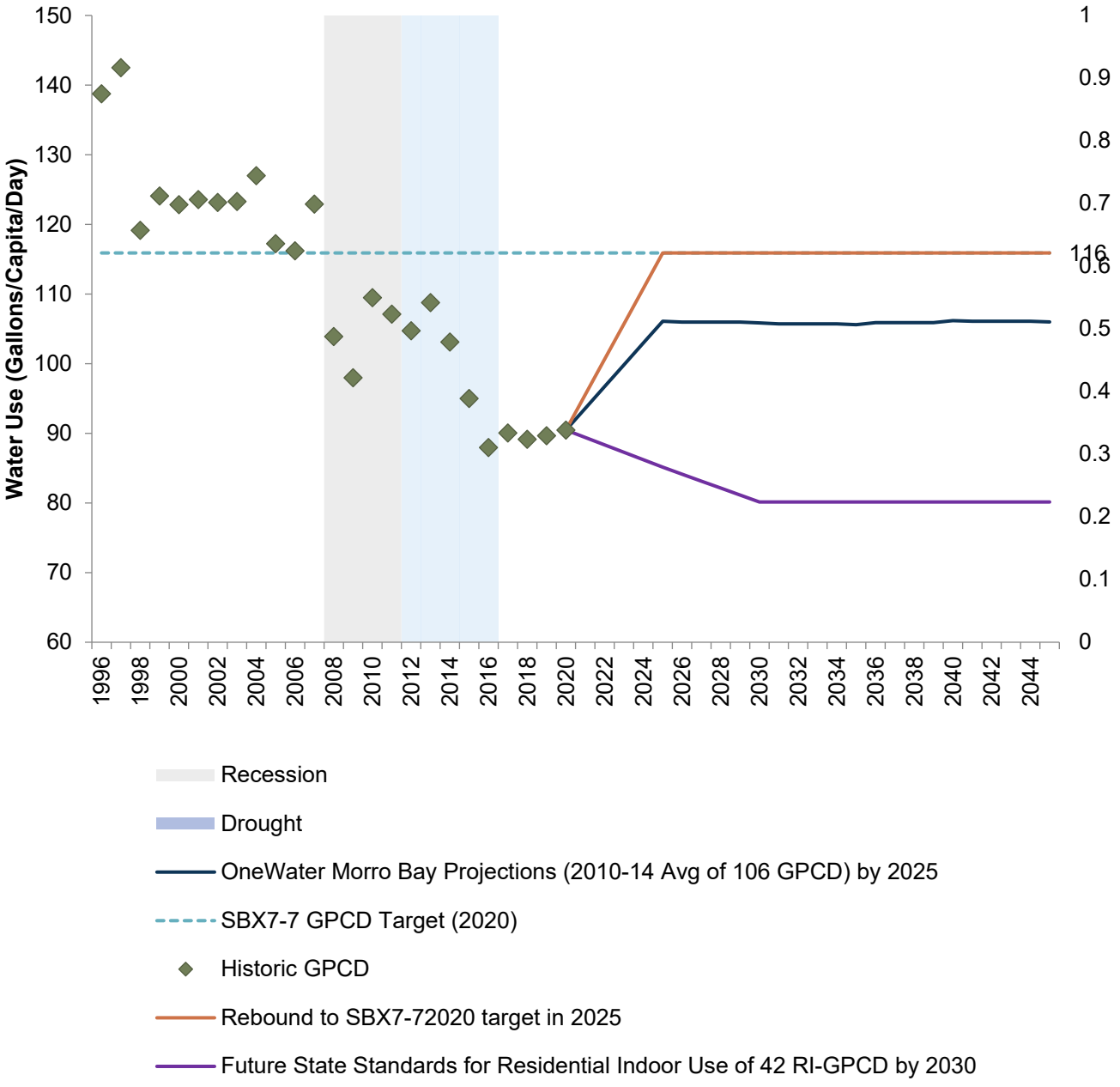

Figure 4-2. Historical and Potential Future Per Capita Demand

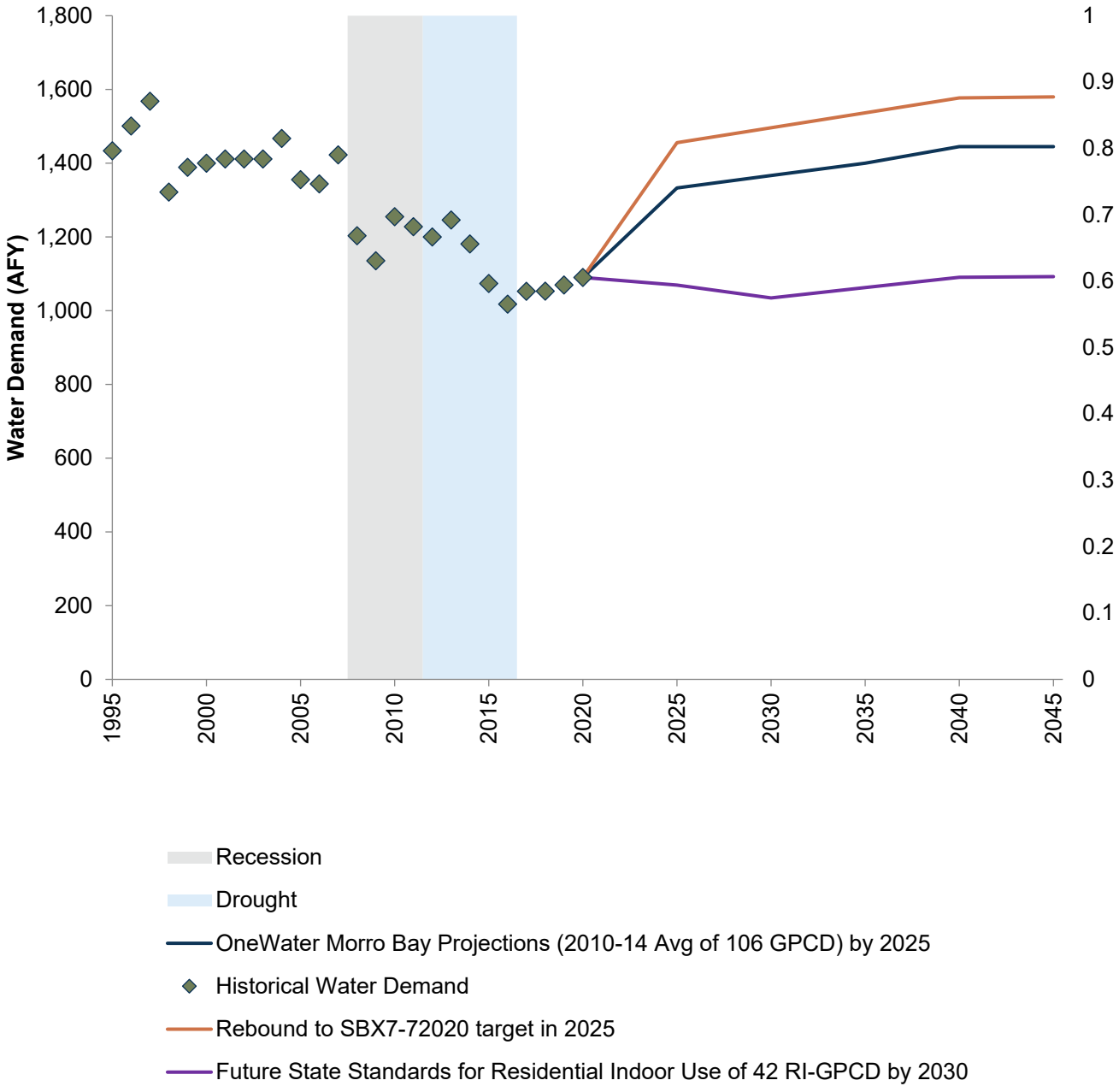

Figure 4-3. Historical and Potential Future Water Demand

Table 4-4. DWR 4-2R Projected Demands for Water

USE TYPE	PROJECTED WATER USE				
	2025	2030	2035	2040	2045
Single-Family Residential	687	704	722	745	745
Multi-Family Residential	163	167	171	176	176
Commercial	303	311	319	329	329
Institutional/Governmental	65	67	68	71	71
Landscape	22	23	23	24	24
Losses	92	95	97	100	100
TOTAL	**1,333**	**1,366**	**1,400**	**1,445**	**1,445**

Note:
1. Water deliveries for the Industrial customer class totaled less than 1 AFY and were not included in this table

Table 4-5 satisfies the requirement to determine if anticipated water conservation savings were incorporated when developing future demand projections. Conservation savings were not considered and included in developing demand estimates for the next 20 years by using the selected target of 106 GPCD, which is assumed to represent unconstrained demand.

Table 4-5. DWR 4-5R Inclusion in Water Use Projections

Are Future Water Savings Included in Projections? Refer to Appendix K of UWMP Guidebook.	Yes
Section or page number where the citations utilized in the demand projections can be found:	4.2.4
Are Lower Income Residential Demands Included in Projections?	Yes

4.2.5 Characteristic Five-Year Water Use

In addition to past and projected uses, the UWMP more closely analyzes anticipated conditions for the next five years (2021 – 2025). In the next five years, the City anticipates that demands may increase to approximately 1,333 AFY. This increase is based on normal year conditions representing a "rebound" from current 2020 use and an increase in population and associated non-residential demand. 2020 use is likely lower than typical unconstrained demand as many of the City's residents continue to conserve water after the most recent drought and economic recession. Details on an analysis for the next five years are discussed in **Chapter 7**.

4.3 Water Use for Lower Income Households

Changes to the CWC section 10631.1 since 2005 require demand projections to include projected water use for single-family and multi-family residential housing needed for lower income households. Low-income households are defined as households making less than 80% of the statewide median household income. The Regional Housing Needs Assessment (RHNA) determines the housing needs in each jurisdiction over the planning period. SLOCOG's current RHNA planning period is from January 1, 2019, through December 31, 2028. For this planning period, one hundred and fifty-seven (157) new low- and very low-income units are projected to be needed in the City by 2028 (SLOCOG, 2019). It is

important to note that the RHNA requirement is to have land zoned for the projected low-income housing need but not necessarily build the units. The low-income deliveries projections are included in the City's total projected water deliveries as part of the GPCD demand projection calculation, as shown in **Table 4-4**. Additionally, it should be noted that Morro Bay does not actively monitor demand for lower income households for billing purposes.

4.4 Climate Change Considerations

Consistent future use of groundwater and SWP sources may be affected by climate change.

"Projections of climate change in California indicate a further intensification of wet and dry extremes and shifting temperatures that can…affect both water use and supplies. Extreme and higher temperatures can lead to increases in water use…Projections of more frequent, severe, and prolonged droughts could lead to not only less surface water available, but also exacerbating ongoing stressors in groundwater basins across the state"

(Resources, March 2021).

Higher temperatures decrease the amount of precipitation available for groundwater recharge and from surface water sources while increasing water use, especially for outdoor use. Reductions in future supply due to impacts associated with climate change were considered as part of the projected supply discussed in **Chapters 6** and **7**. Increases in future water use patterns due to climate change factors were considered as part of the conservative demand projection provided in **Chapter 4**.

5

URBAN WATER MANAGEMENT PLAN

SBX7-7 Baseline, Targets, and 2020 Compliance

This chapter describes compliance with the Water Conservation Act of 2009 Baseline, Targets, and 2020 Compliance. The goal of this chapter is to demonstrate compliance with the targeted 2020 water-use reduction of 20 percent from the Baseline.

IN THIS SECTION

- SBX7-7 Baselines & Targets Forms and Tables
- 2020 Compliance

Senate Bill X7-7 (SBX7-7) was incorporated into the UWMP Act in 2009 and requires that all urban 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.

This chapter describes the City's methods for calculating baseline and target water consumption in accordance with DWR's Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use (California Department of Water Resources, February 2016). The SBX7-7 Verification Forms and Compliance Forms, which are required to be submitted to DWR to demonstrate compliance with the SBX7-7 requirements, are presented in **Appendix E**. This chapter also shows that the City achieved its 2020 water use target of 116 GPCD with a calculated GPCD for 2020 of 90 GPCD.

5.1 SBX7-7 Forms and Tables

The SBX7-7 Verification Form was submitted as part of the City's 2015 UWMP to establish the baseline and 2020 water use target. Since the 2015 UWMP there have been no significant changes to the City's service area that impact population. The City now serves the Morro Bay Power Plant, but the plant has received little to no water from the City and does not have an associated residential population. Therefore, the SBX7-7 baseline, and target are assumed to be the same as reported in the 2015 UWMP. The City's baseline and 2020 water use target are summarized in **Table 5-1.**

The City selected SBX7-7 Method 3 to determine the 2020 GPCD target. This method results in a target of 117 GPCD which is 95% of the Central Coast Hydrologic Region baseline. Regardless of the target calculation method, each agency must confirm that the calculated 2020 target meets the minimum reduction required. This minimum reduction is defined as 5 percent of the 5-year baseline per capita water use of 122 GPCD shown in **Table 5-1**. The 2020 target must be less than 95 percent of the 5-year baseline. Since the 2020 Target of 117 GPCD is higher than 95% of 122, or 116 GPCD, the lower calculation establishes the confirmed 2020 target of 116 GPCD. A copy of the completed SBX7-7 Verification Form is included in **Appendix E**.

Table 5-1. DWR 5-1R Baselines and Targets Summary

BASELINE PERIOD	START YEAR	END YEAR	AVERAGE BASELINE GPCD*	CONFIRMED 2020 TARGET *
10-15 Year	1995	2004	128	116
5 Year	2003	2007	122	

*All values are in Gallons per Capita per Day (GPCD)

*All cells in this table are populated manually from the supplier's SBX7-7 Verification Form.

5.2 2020 Compliance Daily Per-Capita Water Use (GPCD)

As part of the 2020 UWMP, the City must demonstrate compliance with its 2020 water use target by completing the SBX7-7 2020 Compliance Form. This form is an abbreviated version of the SBX7-7 Verification Form solely for 2020 compliance calculations. A summary of the 2020 SBX7-7 2020 Compliance Form is shown in **Table 5-2.** There were no extreme cases that warranted an adjustment to the GPCD compliance calculation. The calculated GPCD for 2020 is 90 GPCD, which meets the City's 2020 SBX7-7 target of 116 GPCD. A copy of the completed SBX7-7 Compliance Form is included in **Appendix E**.

Table 5-2. DWR 5-2R 2020 Compliance

	OPTIONAL ADJUSTMENTS TO 2020 GPCD						
ACTUAL 2020 GPCD*	EXTRAORDINARY EVENTS*	ECONOMIC ADJUSTMENT*	WEATHER NORMALIZATION*	TOTAL ADJUSTMENTS*	ADJUSTED 2020 GPCD*	2020 CONFIRMED TARGET GPCD*	SUPPLIER ACHIEVED TARGETED REDUCTION IN 2020
90	0	0	0	0	90	116	Yes

*All values are in Gallons per Capita per Day (GPCD)

*All cells in this table are populated manually from the supplier's SBX7-7 Verification Form.

6

URBAN WATER MANAGEMENT PLAN

Water Supply Characterization

This chapter describes and quantifies the City's current and projected water supplies. Each water source is characterized with information needed to manage water resources, assess supply reliability, perform the Drought Risk Assessment, and prepare and implement the WSCP.

The following sections provide an overview of the City's current and projected water supplies through 2045. The City relies on multiple water supply sources as described in more detail in the following sections. The City anticipates meeting customer demands through 2045. The City's current supply sources include purchased State Water Project (SWP) water and local groundwater. A description of the City's planning efforts for recycled water are also included within this section of the UWMP.

IN THIS SECTION

6.1 Water Supply Analysis Overview

This section describes and quantifies the current and projected sources of potable water available to the City for the 25-year period covered by the UWMP. A description and quantification of existing and potential non-potable recycled water uses, and supply availability is also included. **Table 6-1** provides a summary of the existing and planned potable water supply volumes from 2020 to 2045 in five-year increments

Table 6-1. Current and Projected Potable Water Supplies (AFY) (DWR Tables 6-8 & 6-9)

		ACTUAL WATER SUPPLY PRODUCTION (AFY)	REASONABLY AVAILABLE VOLUME (AFY)					
WATER SUPPLY	ADDITIONAL DETAIL ON WATER SUPPLY	2020	2020	2025	2030	2035	2040	2045
Purchased or Imported Water	SWP	1,029	1,313	1,313	1,313	1,313	1,313	1,313
Brackish Groundwater (Morro Basin)	Treated brackish groundwater at RO plant	61	407	407	407	407	407	407
	TOTAL	**1,090**	**1,720**	**1,720**	**1,720**	**1,720**	**1,720**	**1,720**

6.2 UWMP Water Supply Characterization

The City's water supply sources include groundwater from the Morro Valley Basin and imported SWP water via contract with the San Luis Obispo County Flood Control and Water Conservation District (SLOCFCWCD). The City does not currently utilize surface water, stormwater, or recycled water. However, the City's Water Reclamation Facility is currently under development and the City has plans to implement recycled water as a supplemental supply source through indirect potable reuse (IPR). The water supply used to meet City customers' current and future demands is described below.

6.2.1 Purchased or Imported Water

The City purchases imported water from the SWP via contract with SLOFCWCD. By contract, the City is limited to 1,313 AFY of SWP water. The City has two existing contracts with the SLOCFCWCD for SWP water, both executed in 1992.

SLOFCWCD was established in 1945 to provide flood control for the County and expanded to perform water resources management. In addition to supplying water to its eleven purveyors, SLOFCWCD has operational relationships and agreements with the Department of Water Resources (DWR) and Central Coast Water Authority (CCWA). SLOCFCWCD obtains its water supply and conveyance capacity from DWR who owns and operates the SWP. CCWA operates and maintains the conveyance system for DWR that delivers SWP to SLOCFCWCD, therefore SLOCFCWCD interacts with CCWA for water delivery requests.

The City relies mostly on imported water from the SWP and local groundwater. However, the City's local groundwater requires treatment due to elevated nitrate levels and is a less cost-effective supply source. Therefore, the City's existing water supplies currently consist primarily of SWP water.

Contractually, the City is entitled to 1,313 AFY of SWP water, plus an additional 174 percent "drought buffer" to ensure reliability when the DWR reduces deliveries during dry years. The "drought buffer", detailed in the Drought Buffer Water Agreement for 2,290 AFY, allows The City to receive its full 1,313 AFY allocation when the SWP can deliver at least 36 percent of contracted allocations.

The City holds 2,290 AFY of additional allocation with the District, usually referred to as a "drought buffer", as described above. Drought buffer water is water that has no pipeline capacity for delivery. Rather, it is used to increase deliveries during times of drought when Table A allocations are less than 100%. Throughout every year DWR sets allocations as a percentage of contracted volumes for SWP Contractors based on consideration of hydrologic and climatic data and modeling. Historically, percentage allocations have ranged from 5%- 100%. For example, if Table A allocations were 40% of contracted amounts, without a drought buffer the City would receive 525 AF of water considering the City's subcontracts, and with a drought buffer of 1,313 AF the City would receive an additional 788 AFY for a total of 1,313 AFY. In any given year, however, under its current contracts the City's total SWP deliveries cannot exceed 1,313 AF and the amount that can be stored in San Luis Reservoir follows the methodology described below.

Stored SWP Water

During years when the City has access to SWP water in excess of 1,313 AF a portion of that water can be stored in San Luis Reservoir for subsequent delivery in future years. However, there are limitations on the amount of water that can be stored. The calculations that DWR uses to determine how the maximum amount of water the City can place in storage are outlined below.

It should be noted that these calculations are the maximum amount of excess SWP water that the City can store, and the City is limited to storing water only when there is SWP in excess of 1,313 AF. Additionally, water stored in San Luis Reservoir can be lost due to spills or interference with SWP operations. The values of stored SWP water shown in **Figure 7-2** are based on the actual amount of stored SWP water available to the City in 2021.

Where:

A = Available Water

T = Table A Water

B = Drought Buffer

D = Delivery Percentage

A = (T+B)D

S = Storage Amount

For deliveries from 0% to 50% the maximum storage allowed is 25% of the available water as shown in Equation 1.

Equation 1 $0 \leq D \leq 50\%, S \leq 0.25 \times A$

For deliveries from 51% to 74% the maximum storage allowed is 25% plus 1% for every percentage point over 50% that is delivered as shown in Equation 2.

Equation 2 $\text{For } 50\% < D < 75\%, S \leq [(D-50\%) + 0.25] \times A$

For deliveries 75% and over the maximum storage allowed is 50% of the available water as shown in Equation 3.

Equation 3 $\text{For } D \geq 75\%, S = 0.50 \times A$

Sample Calculations:

D = 20%

Maximum Storage, S = 0.25A **Equation 1**

S = 0.25[(T+B)x0.20]

S = 0.25[(1,313+2,290)x0.20]

S = 0.25(721)

S = 180 AF

D = 62%

Maximum Storage, S = [(D-50%) + 0.25] x A **Equation 2**

S = [(D-50%) + 0.25] x [(T+B)D]

S = [(62%-50%) + 0.25] x [(1,313+2,290)0.62]

S = (0.12 + 0.25) x [(3,603)0.62]

S =.37 x 1,537.6

S = 826.5 AF

D = 85%

Maximum Storage, S = 0.50A **Equation 3**

S = 0.50(T+B)D

S = 0.50(1,313+2,290).85

S = 0.50(3,063)

S = 1,531 AF

Historically, the City has received about 80 percent of its domestic water supply from imported SWP water. Currently, the City supplements imported SWP supply with groundwater from the Morro well field treated by the brackish water reverse osmosis (BWRO) facility.

6.2.2 Groundwater

The City has a groundwater allocation of 581 AFY from the Morro Valley Basin (Groundwater Basin No. 3-41) via groundwater permits. The groundwater permits from the State Board Division of Water Rights are provided in Appendix H.

Prior to SWP water deliveries, the City relied solely on groundwater as its primary source of water. The Morro Valley Basin is a shallow alluvial basin which behaves similar to an underground stream. Rainfall in the watershed percolates into the ground and flows underground to the ocean. The State Board controls the use of groundwater determined to be riparian underflow. In 1972, the City applied for permits to appropriate water from the Morro Valley Basin. In 1995, the State Board approved water right permits for up to 1.2 cubic feet per second (cfs) and 581 AFY from the Morro Valley Basin.

While the City has rights to 581 AFY of groundwater pumping rights, the quality of water within the Morro Valley Basin is poor and requires treatment to reduce nitrate levels. Due to the groundwater requiring treatment, the City can only yield approximately 70% of the 581 AFY that the City has rights to as available supply. With treatment taken into consideration, the City reliably has access to 407 AFY from the Morro Valley Basin.

Between 2016 and 2020, the City produced groundwater from the Morro Valley Basin which met from 4 percent to 25 percent of the average total demand. These numbers have varied from year to year depending upon weather conditions, groundwater recharge rates, and groundwater blending requirements due to groundwater quality. **Table 6-2** shows the amount of groundwater pumped from 2016-2020.

Table 6-2. DWR 6-1R Groundwater Volume Pumped

GROUNDWATER TYPE	LOCATION OR BASIN NAME	2016	2017	2018	2019	2020
Brackish Groundwater (Morro Basin)	Morro Valley Basin (Groundwater Basin No. 3-41)	36 AFY	106 AFY	93 AFY	101 AFY	61 AFY

Brackish water reverse osmosis skid used to remove nitrates from Morro Valley Groundwater

6.2.2.1 Morro Valley Basin Groundwater Basin No. 3-41

The Morro Valley Basin encompasses approximately 1,200 acres (1.9 square miles). The basin is bounded by the Pacific Ocean, the Morro Bay estuary, and by impermeable rock units. Most of the basin area is within unincorporated San Luis Obispo County, with The City overlying the basin area southwest of the narrows near Highway 1. Recharge to the basin comes primarily from seepage of surface flows in Morro Creek and Little Morro Creek, deep percolation of precipitation, and residential/agricultural return flows. The water supply aquifers are predominantly within alluvial deposits drained by Morro Creek, which are comprised of gravel, sand, silt, and clay. The alluvial deposits are typically up to 80 feet thick.

Morro Valley Basin groundwater potential pumpers include the City, Morro Bay Mutual Water Company, a small public water system (mobile home park), and residential and agricultural overlying users. The City pumps Morro Creek underflow from the basin with a permitted allocation of 581 AFY from the State Board.

The perennial yield of Morro Valley Basin is estimated at 1,500 AFY. Analysis indicates during drought conditions concurrent operation of the City's seawater and fresh water supply wells could subject freshwater wells to seawater intrusion. Seawater intrusion and nitrates are the predominant concerns for water quality in this basin. In the mid-1980's, TDS concentrations in groundwater downstream of the narrows near Highway 1 began to exceed 1,000 mg/L seasonally due to seawater intrusion and tidal influences. In 2007, basin TDS concentrations were typically between 400 and 800 mg/L increasing with proximity to the coast, except for an area beneath agricultural fields in the lower valley where TDS concentrations reached 1,000 mg/L, and nitrate concentrations reached 220 mg/L.

Constraints on water availability in this basin include physical limitations, water quality issues, and water rights. Shallow alluvial deposits are typically more susceptible to drought impacts. For the upper Morro Valley, water level and well capacity declines during drought limit the availability of the resource; while in the lower valley area, seawater intrusion is the primary constraint. Elevated nitrates are a constraint for drinking water availability at the City's well field where production is also limited by permitted appropriative water rights.

6.2.2.2 Groundwater Management

Groundwater management of Morro Valley Basins is not judicially designated as with the Los Osos Basin adjudication. However, since the basin is supplied by riparian underflow, the State Board issues water right permits for groundwater extraction, thus effectively managing groundwater resources.

Additionally, water agencies in the region manage groundwater resources through cooperative planning, with SLOCFCWCD as the lead agency. With input from water agencies, SLOCFCWCD updated the county's Master Water Report (MWR) in 2012 to detail a regional water resources plan. The analysis was divided by water planning areas (WPAs), which recognize jurisdictions that overlie groundwater basins and interconnected watersheds in order to assess their relationship. The MWR water management strategies are consistent with local purveyor water demand projections and planned water supply projects. The MWR was developed with input from all interested parties including the County's seven cities, eight community service districts (CSDs), agricultural, developer and environmental organizations, institutions (California Men's Colony, Cuesta College, etc.), and a member from each supervisorial district.

The Morro Bay WPA includes Morro Bay, the Chorro Valley Water System (California Men's Colony, Cuesta College, Camp San Luis Obispo (National Guard), County Operations Center/Office of Education), and agricultural and other rural overlying users. The only groundwater supplies within the WPA are Chorro and Morro Valley Basins. Other major supply sources in the WPA include the SWP, desalination (City of Morro Bay), Whale Rock Reservoir, Chorro Reservoir, and recycled water. The issues in this WPA include drought impacts to groundwater supplies and groundwater quality, plus the availability/reliability of SWP water from year to year.

6.2.3 Surface Water

The City does not use water directly from any surface water source. Indirectly, the City uses surface water via the SWP and via groundwater riparian underflow.

6.2.4 Stormwater

The City does not currently have any stormwater recovery systems as a water supply source.

6.2.5 Wastewater and Recycled Water

The UWMP Act requires that the UWMP address the opportunities for development of recycled water, including: the description of existing recycled water applications, quantities of wastewater currently being treated to recycled water standards, limitations on the use of available recycled water, an estimate of projected recycled water use, the feasibility of projected uses, and practices to encourage the use of recycled water.

6.2.5.1 Past Five Years

Over the past 5 years, the City has reduced groundwater production and switched to using primarily purchased SWP water due to groundwater overdraft, quality issues, and limited water rights.

6.2.5.2 Wastewater Collection, Treatment, and Disposal

The City, in conjunction with Cayucos Sanitary District, operates a wastewater treatment plant (WWTP) under National Pollutant Discharge Elimination System (NPDES) Permit No.R3-2008-0065. The WWTP employs a centralized wastewater treatment strategy in which wastewater is collected from residences and industries throughout the City and Cayucos Sanitary District service areas and conveyed via a wastewater collection system to the WWTP. The quantity of wastewater collected in the City's service area is presented in **Table 6-3**. The WWTP historically has served the City and the community of Cayucos located in unincorporated San Luis Obispo County, however the WWTP is no longer receiving wastewater flows from Cayucos and future flows will be solely from the City. In 2020 the WWTP treated a total of 1,015 AF of wastewater with 79.5% (807 AF) of flows coming from within the City's service area.

The WWTP historically discharges an average of 1.10 million gallons per day (MGD) (3.4 AFY). The WWTP was designed to accommodate an average dry-weather flow of 2.06 MGD, a peak seasonal dry-weather flow of 2.36 MGD, and a peak wet-weather flow of 6.64 MGD. **Table 6-4** provides the WWTP treatment and discharge volumes in units of AFY.

All wastewater is treated through a primary treatment process which includes screening, grit removal, and primary sedimentation. Then, up to 1 MGD of wastewater is diverted to a secondary treatment process which uses biofilters, a solids-contact chamber, and a secondary clarifier. The secondary treatment process consists of parallel single-stage, high-rate, trickling filters whose combined outflow goes to a solids contact channel and then to a secondary sedimentation tank. Flows in excess of 1 MGD receive primary treatment only before blending with secondary effluent, disinfection, and discharge. The treated effluent from the WWTP is discharged through a 27-inch diameter pipeline that extends 2,700 feet offshore to an outfall within Estero Bay and subsequently the Pacific Ocean. The City is current constructing a new wastewater treatment facility or Water Reclamation Facility.

Table 6-3. DWR 6-2R Wastewater Collected within Service Area in 2020

WASTEWATER COLLECTION			RECIPIENT OF COLLECTED WASTEWATER			
NAME OF WASTEWATER COLLECTION AGENCY	WASTEWATER VOLUME METERED OR ESTIMATED	WASTEWATER VOLUME COLLECTED FROM UWMP SERVICE AREA IN 2020 (AFY)	NAME OF WASTEWATER AGENCY RECEIVING COLLECTED WASTEWATER	WASTEWATER TREATMENT PLANT NAME	WASTEWATER TREATMENT PLANT LOCATED WITHIN UWMP AREA	WWTP OPERATION CONTRACTED TO A THIRD PARTY
City of Morro Bay/Cayucos	Metered	807	City of Morro Bay and Cayucos Sanitary District	Morro Bay/Cayucos WWTP	Yes	No
	TOTAL	**807**				

Table 6-4. DWR 6-3R Wastewater Treatment and Discharge within Service Area in 2020

							2020 VOLUMES (AFY)				
WASTEWATER TREATMENT PLANT NAME	DISCHARGE LOCATION NAME OR IDENTIFIER	DISCHARGE LOCATION DESCRIPTION	WASTEWATER DISCHARGE ID NUMBER	METHOD OF DISPOSAL	PLANT TREATS WASTEWATER GENERATED OUTSIDE THE SERVICE AREA	TREATMENT LEVEL	WASTEWATER TREATED (AFY)	DISCHARGED TREATED WASTEWATER (AFY)	RECYCLED WITHIN SERVICE AREA	RECYCLED OUTSIDE OF SERVICE AREA	INSTREAM FLOW PERMIT REQUIREMENT
Morro Bay/Cayucos WWTP	1	Lat 35, 23',11" N; Long 120, 52', 29" W	NPDES No. CA0047881	Ocean outfall	Yes	Secondary, Disinfected - 23	1,015	1,015	0	0	0
						TOTAL	**1,015**	**1,015**	**0**	**0**	**0**

6.2.5.3 Recycled Water System Description

The City does not currently have a recycled water system in place.

6.2.5.4 Potential, Current, and Projected Recycled Water Uses

The City began evaluation of recycled water starting in 2016 with a Water Reclamation Facility Master Plan (FMP). The FMP evaluated the treatment costs associated with both potable and non-potable recycled water options. In order to determine the best recycled water end use, the City evaluated numerous non-potable and potable recycled water options in the Water Reclamation Facility Plan. The treatment costs developed in the FMP were used as an input for the alternatives analysis in the Water Reclamation Facility Plan. The alternatives analysis in the Water Reclamation Facility Plan considered both economic and non-economic criteria to evaluate four recycled water options and ultimately recommended indirect potable recharge (IPR) of groundwater at one of two injection locations in the City. The IPR alternative was recommended in part because it has the highest potential for potable water offset. The City then began OneWater Morro Bay to evaluate IPR along with other potable water supply options available including desalination and groundwater without augmentation. When evaluated against these other water supply options, IPR was recommended based on its drought resiliency and ability to offset imported water use (i.e., SWP).

The WRF will utilize three processes to meet the virus, Giardia, and Cryptosporidium log reduction requirements required by the Division of Drinking Water (DDW). These processes are:

- Ultrafiltration (UF).
- Reverse Osmosis (RO)
- Ultraviolet advanced Oxidation Process (UV AOP)

The City plans on injecting recycled water into the Morro Valley Basin when the WRF system is in place. However, the City only plans on extracting additional IPR water on an as needed basis. The City's current permit with the SWRCB allows for extraction of 581 AFY of water from the Morro Valley Basin. With the implementation of the IPR Project, it is envisioned that the City would be able to extract more than 581 AFY because the City would be injecting additional water into the groundwater basin that is not subject to the SWRCB permit extraction limits.

6.2.5.5 Actions to Exchange and Optimize Future Recycled Water Use.

As described in the previous section, the City has investigated the potential for groundwater recharge for a potential indirect potable reuse project. **Table 6-5** summarizes the City's immediate planning efforts to encourage and optimize recycled water use. The expected increase of recycled water use in the City is based on the projected amount that the City will need during a consecutive drought described in **Chapter 7**.

Table 6-5. DWR 6-6R Methods to Expand Future Recycled Water Use

NAME OF ACTION	DESCRIPTION	PLANNED IMPLEMENTATION YEAR	EXPECTED INCREASE OF RECYCLED WATER USE (AFY)[1]
Water Reclamation Facility[2]	Groundwater Recharge (IPR) injection into the Lower Morro Valley Groundwater Basin.	2025	317*
		TOTAL	**317**

*.The City is still in the process of evaluating the exact amount of water the City will be able to extract from the IRP project, however based on preliminary hydrogeological studies this value reported is a conservative and reasonable quantity. The most recent hydrogeologic study performed by GSI Solutions Inc. can be found on the City's website here: https://morrobaywrf.com/wp-content/uploads/Characterization-and-Selection-of-Project-Area.pdf

1. The City plans on injecting recycled water into the Morro Valley Basin when the WRF system is in place. However, the City only plans on extracting additional IPR water on an as needed basis.

2. Additional information on the project can be found on the City's website at https://morrobaywrf.com/documents/

6.2.6 Desalinated Water Opportunities

The City's desalination plant was originally permitted and constructed in 1992 to provide seawater desalination during a drought emergency. In 2009, the City's desalination plant was expanded to treat brackish groundwater. The two treatment trains, seawater reverse osmosis and brackish water reverse osmosis, which historically have been able to treat 645 AFY and 581 AFY, respectively. The latter treatment train is capable of treating the entire 581 AFY of Morro Valley Basin groundwater that the City is permitted to extract.

In 2010 the desalination plant served as The City's primary source of water supply for a few months due to an extended SWP shutdown. The desalination plant is currently used on a very limited basis to treat high-nitrate groundwater from the Morro Valley Basin in order to supplement SWP supply. The plant provides a source of backup and emergency water supply in case of future SWP supply reductions or service outages. Once the City has gone through the permitting process with California Coastal Commission and the Water Board, the plant could potentially serve as a primary source of supply, replacing the SWP water. Currently, the City has decommissioned associated equipment due to equipment age and needed repairs. While desalinated water is not currently used as part of the City's available supply, the City has maintained its permits and wells for the seawater desalination plant for potential future use.

6.2.7 Water Exchanges and Transfers

The City does not, at this time, pursue separate water transfer or exchange opportunities with other agencies or suppliers. Such an arrangement could occur in the future.

6.2.8 Future Water Projects

While the City constructs capital improvement projects, as needed, as part of its maintenance of existing water supply infrastructure, these projects do not increase the City's water supply and therefore are not included here. However, The City plans to construct a water recycling treatment plant and distribution system as described in **Sections 6.2.5.3** through **Section 6.2.5.5**. The proposed water reclamation facility is listed in **Table 6-6**, which summarizes future water supply projects. The City only plans on extracting additional IPR water on an as needed basis. Therefore, the expected increase of recycled water supplies the City has available is based on the projected amount that the City will need during a consecutive drought, as described in **Chapter 7**.

Table 6-6. DWR 6-7R Expected Future Water Supply Projects or Programs

NAME OF FUTURE PROJECTS OR PROGRAMS	JOINT PROJECT WITH OTHER SUPPLIERS	AGENCY NAME	DESCRIPTION	PLANNED IMPLEMENTATION YEAR	PLANNED FOR USE IN YEAR TYPE	EXPECTED INCREASE IN WATER SUPPLY TO SUPPLIER (AFY)[1]
Water Reclamation Facility[2]	No		Groundwater Recharge (IPR) injection into the Lower Morro Valley Groundwater Basin.	2025	Multi-Dry Year	317*

*.The City is still in the process of evaluating the exact amount of water the City will be able to extract from the IRP project, however based on preliminary hydrogeological studies this value reported is a conservative and reasonable quantity. The most recent hydrogeologic study performed by GSI Solutions Inc. can be found on the City's website here: https://morrobaywrf.com/wp-content/uploads/Characterization-and-Selection-of-Project-Area.pdf

1. The City plans on injecting recycled water into the Morro Valley Basin when the WRF system is in place. However, the City only plans on extracting additional IPR water on an as needed basis.

2. Additional information on the project can be found on the City's website at https://morrobaywrf.com/documents/

6.2.9 Climate Change Effects

Future water use may be affected by climate change.

"Projections of climate change in California indicate a further intensification of wet and dry extremes and shifting temperatures that can…affect both water use and supplies. Extreme and higher temperatures can lead to increases in water use…Projections of more frequent, severe, and prolonged droughts could lead to not only less surface water available, but also exacerbating ongoing stressors in groundwater basins across the state" (California Department of Water Resources, March 2021).

Higher temperatures decrease the amount of precipitation available for groundwater recharge and from surface water sources while increasing water use, especially for outdoor use. Reductions in future supply due to impacts associated with climate change were based on estimates from the 2019 DWR State Water Project Delivery Capability Report and considered as part of the projected supply discussed in Chapter 6 and Chapter 7. Increases in future water use patterns due to climate change factors were considered as part of the conservative demand projection provided in Chapter 4. Imported surface water from the SWP is potentially subject to cutbacks for climatic, legal, environmental and water quality reasons.

6.2.10 Summary of Existing and Planned Sources of Water

The City's actual and projected supply is shown in **Table 6-7** and **Table 6-8**.

Table 6-7. DWR 6-8R Actual Water Supplies

		2020		
WATER SUPPLY	ADDITIONAL DETAIL ON WATER SUPPLY	ACTUAL VOLUME (AFY)	WATER QUALITY	TOTAL RIGHT OR SAFE YIELD (AFY)
Purchased or Imported Water	SWP	1,029	Drinking Water	1,313
Brackish Groundwater (Morro Basin)	Treated brackish groundwater at RO plant	61	Drinking Water	407
	TOTAL	**1,090**		**1,720**

Table 6-8. DWR 6-9R Projected Water Supplies

		PROJECTED WATER SUPPLY									
		2025		2030		2035		2040		2045	
WATER SUPPLY	ADDITIONAL DETAIL ON WATER SUPPLY	REASONABLY AVAILABLE VOLUME (AFY)	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME (AFY)	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME (AFY)	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME (AFY)	TOTAL RIGHT OR SAFE YIELD	REASONABLY AVAILABLE VOLUME (AFY)	TOTAL RIGHT OR SAFE YIELD
Purchased or Imported Water	SWP	1,313		1,313		1,313		1,313		1,313	
Brackish Groundwater (Morro Basin)	Treated brackish groundwater at RO plant	407		407		407		407		407	
	TOTAL	**1,720**		**1,720**		**1,720**		**1,720**		**1,720**	

6.3 Energy Intensity

Per Water Code Section 10631.2.(a), the City must include information that could be used to calculate the energy intensity of their water service. The City's water service energy intensity was estimated based on readily available electrical billing data and water production data. Billing records from July 2020 through July 2021 provided the annual total kilowatt hours used in the City's service area. Energy usage is tracked by the City in the following categories: extracting and diverting water from groundwater wells, treating the City's supplies, and distributing potable supplies. The City's average water service energy intensity was 368.4 kilowatt hours per AF (kWh/AF), as shown in **Table 6-9**.

Table 6-9. Energy Reporting – Water Supply Process Approach (DWR Table O-1A)

Start Date for Reporting Period: 07/06/2020

End Date for Reporting Period: 07/07/2021

	URBAN WATER SUPPLIER OPERATIONAL CONTROL							
	WATER MANAGEMENT PRACTICES						NON-CONSEQUENTIAL HYDROPOWER	
	EXTRACT AND DIVERT	PLACE IN STORAGE	CONVEYANCE	TREATMENT	DISTRIBUTION	TOTAL UTILITY	HYDROPOWER	NET UTILITY
Total Volume of Water Entering Process (AF)	64	N/A	N/A	64	1,056	1,056	N/A	1,056
Energy Consumed (kWh)	90,544	N/A	N/A	116,354	182,101	388,999	N/A	388,999
ENERGY INTENSITY (KWH/AF)	**1,416.3**	**N/A**	**N/A**	**1,820.0**	**172.4**	**368.4**	**N/A**	**368.4**

7

URBAN WATER MANAGEMENT PLAN

Water Service Reliability and Drought Risk Assessment

This section considers the City's water supply reliability during normal, single dry, and multiple dry water years over the planning horizon. A Drought Risk Assessment of the next five years is also included.

Water service reliability corresponds to an urban water supplier's ability to meet projected future customer demand under a variety of reasonably expected conditions. 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 the City's current and projected sources of supply through 2045. 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. This chapter also includes the drought risk assessment (DRA), which provides a quick snapshot of the anticipated surplus or deficit if a drought were to occur in the next five years.

IN THIS SECTION

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

This section describes that the water service reliability assessment and 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.

7.1 Water Service Reliability Assessment

The City's 2020 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. This section presents the reliability assessment for the City's service area.

7.1.1 Constraints on Water Sources

7.1.1.1 SWP Constraints

Climactic and environmental factors are the main constraint on the City's SWP supply. Climatic factors affecting the reliability of a given water supply system are generally a function of seasonal precipitation and runoff characteristics. As such, limited recharge and/or drought conditions pose threats to availability of SWP supplies.

California has experienced below-average precipitation and runoff since approximately 2006, resulting in reduced storage in SWP reservoirs. In response, DWR has continued to limit SWP allocations to contractors. As described in **Chapter 6 Section 2.1**, the City's "drought buffer" allocation has minimized the effects of reduced Table A allocations. The City is entitled to a maximum SWP delivery allocation of 1,313 AFY with a 100% SWP allocation; however, when DWR's SWP allocations are lower than 100%, the City can use its 174 percent (2,290 AFY of buffer) "drought buffer" to receive its full 1,313 AFY allocation when the SWP can deliver at least 36.44 percent of contracted allocations. SWP allocations lower than 36.44 percent result in reduced maximum deliveries as demonstrated in **Table 7-1.**

For example, if Table A allocations were 50% of contracted amounts, without a drought buffer the City would receive 657 AFY of water considering the City's subcontracts, and with a drought buffer of 1,313 AF the City would receive an additional 656 AFY for a total of 1,313 AFY. In any given year, however, under its current contracts the City's total SWP deliveries cannot exceed 1,313 AFY and the amount that can be stored in San Luis Reservoir follows the methodology described in the following Section.

Available SWP to City =

If: (Table A Allocation + Drought Buffer)*(Annual Allocation %) > Table A Allocation

Then: Available SWP to City = Table A Allocation

Available SWP to City =

If: (Table A Allocation + Drought Buffer)*(Annual Allocation %) < Table A Allocation

Then: Available SWP to City = (Table A Allocation + Drought Buffer)*(Annual Allocation %)

Example for 50% Annual Allocation

(1,313 AFY + 2,290 AFY)*(50%) > 1,313 AFY
1,802 AFY > 1,313 AFY
Available SWP to City = 1,313 AFY

Example for 20% Annual Allocation

(1,313 AFY + 2,290 AFY)*(20%) < 1,313 AFY
721 AFY < 1,313 AFY
Available SWP to City = 721 AFY

Table 7-1: SWP Water Available to the City Based on Annual Allocation

ANNUAL ALLOCATION %	SWP WATER AVAILABLE TO CITY (AFY)
100%	1313
90%	1313
80%	1313
70%	1313
60%	1313
50%	1313
40%	1313
38%	1313
37%	1313
36%	1297
30%	1081
20%	721
10%	360

The City's water supply from the SWP also has the potential to be affected by environmental issues, particularly involving the Delta Smelt in the Sacramento-San Joaquin Delta issues. SWP pumping capacities were reduced as a result of the May 2007 federal court ruling to protect Delta smelt. However, as mentioned previously, the City has a drought buffer which helps protect the City from reduced SWP supplies. Therefore, even when SWP supplies are decreased, the City's excess SWP entitlement provides a buffer so that contracted volumes to water purveyors, like the City, may still be provided in full. However, it is possible that the Delta's fragile ecosystem, along with severely decreased precipitation patterns, may affect SWP supply reliability for the City to a greater degree at some point in the future (Fugro Consultants, April 2016).

7.1.1.2 Groundwater Constraints

Water quality of Morro Valley Basin is the main constraint on groundwater production. Water Quality of the Morro Valley Basin has been of concern in regard to high concentrations of Nitrate (NO3) and Salinity (TDS). Recent reports indicate upstream fertilizer runoff by agricultural land use has been found to be the leading cause of nitrate contamination in the groundwater basin leading to concentrations as high as 220 mg/L. During drought years, the low groundwater elevation leads to potential seawater intrusion issues threatening the basin groundwater quality. Studies have found that TDS concentrations have ranged from 400 to 1000 mg/L in the Morro Valley Basin. Prior to public distribution, the City treats groundwater yield from the Morro well field for both nitrate and TDS at the BWRO Facility and then finished water is sent to the Kings Tank. While the City has pumping rights to 581 AFY of groundwater from the Morro Valley Basin, since the groundwater must first go through RO treatment at the BWRO Facility, the City can only yield approximately 407 AFY (70% of the 581 AFY that the City has pumping rights to) due to losses during treatment. During drought years the City has potential to improve the treatment efficiency through operational changes and/or blending modifications. To be conservative when analyzing the City's water service reliability and assessing drought risk, available groundwater is reported as 407 AFY which assumes the typical 70% treatment efficiency.

7.1.2 Year Type Characterization

7.1.2.1 Types of Years

This section considers the City's water supply reliability during three climate-related water scenarios, or water year types: average year, single-dry year, and five-consecutive dry years.

These water year types are defined by DWR as follows:

- **Average Year:** The average or normal year is a year or an averaged range of years in the historical sequence that most closely represents mean rainfall and recharge levels and patterns.
- **Single-Dry Year:** This is defined as the year with the minimum useable supply. The supply quantities for this condition are derived from the minimum historical annual yield.
- **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. Water systems are more vulnerable to these droughts of long duration because they deplete water storage reserves in local and state reservoirs and in groundwater basins. The supply quantities for this condition are derived from the actual supplies available during the minimum historical five-year running average yields.

7.1.2.2 Sources for Water Data

7.1.2.2.1 State Water Project

DWR periodically compiles a report on the supply reliability of SWP water under current and projected future water conditions. DWR's 2019 Delivery Reliability Report describes the historical and projected deliveries to the State Water Contractors during normal years and over various drought-year periods. Although the relative percent deliveries included in the 2019 Delivery Reliability Report apply specifically to State Water Contractors allocations, these percentages correspond to percent reduction that the City may experience in drought conditions. Table A allocations from the 2019 Delivery Reliability Report projected an average delivery of 58% (California Department of Water Resources, 2020). The 58% allocation combined with the City's drought buffer will allow the City to receive 1,313 AFY under average year conditions. Factoring in this projected average, 2019 was selected as a representative average year because the City's full allocation of 1,313 AFY was available due to their drought buffer as described in **Section 7.1.1.1**. SWP supplies for single dry year deliveries were calculated using the minimum historical Table A allocation from 2000-2020. SWP supplies for consecutive dry years were calculated using the minimum 5-year average historical Table A allocations

from 2000-2020, however future conditions may alter supply availability assumptions. As additional climate change data becomes available the water service reliability assessment and the DRA will be updated in future iterations of the UWMP. Since SWP water makes up largest share of the City's water supply, the base years for SWP were also used for the other water supplies.

Table 7-2. DWR 7-1R Basis for Water Year Data (Reliability Assessment)

SWP

YEAR TYPE	BASE YEAR	AVAILABLE SUPPLY IF YEAR TYPE REPEATS	
		VOLUME AVAILABLE (AFY)	PERCENT OF AVERAGE SUPPLY
Average Year	2019	1,313	100%
Single-Dry Year	2014	180	14%
Consecutive Dry Years 1st Year	2012	1,313	100%
Consecutive Dry Years 2nd Year	2013	1,261	96%
Consecutive Dry Years 3rd Year	2014	180	14%
Consecutive Dry Years 4th Year	2015	721	55%
Consecutive Dry Years 5th Year	2016	1,313	100%

7.1.2.2.2 Morro Valley Basin Groundwater

The City has access to groundwater supply from the Morro Valley Basin (Groundwater Basin No. 3-41). The City has 581 AFY of water from the Morro Valley Basin allocated to them via groundwater permits. The groundwater permits from the California State Water Resources Control Board (SWRCB) Division of Water Rights are provided in **Appendix H**.

While the City has rights to 581 AFY of groundwater pumping rights, the quality of water within the Morro Valley Basin is poor and requires treatment to reduce nitrate levels. Due to the groundwater requiring treatment, the City can only yield approximately 70% of the 581 AFY that the City has rights to as available supply. With treatment taken into consideration, the City reliably has access to 407 AFY from the Morro Valley Basin.

However, it is important to note that the City has made and continues to make planning efforts to limit its groundwater pumping to within sustainable amounts due to the threat of seawater intrusion. Therefore, as described in **Chapter 6**, the City intends to develop a Water Reclamation Facility to utilize recycled water to replenish the City's local groundwater basin through IPR in order to enhance groundwater supply reliability.

Table 7-3. DWR 7-1R Basis for Water Year Data (Reliability Assessment)

GROUNDWATER			
YEAR TYPE	BASE YEAR	AVAILABLE SUPPLY IF YEAR TYPE REPEATS	
		VOLUME AVAILABLE (AFY)	PERCENT OF AVERAGE SUPPLY
Average Year	2019	407	100%
Single-Dry Year	2014	407	100%
Consecutive Dry Years 1st Year	2012	407	100%
Consecutive Dry Years 2nd Year	2013	407	100%
Consecutive Dry Years 3rd Year	2014	407	100%
Consecutive Dry Years 4th Year	2015	407	100%
Consecutive Dry Years 5th Year	2016	407	100%

7.1.3 Water Service Reliability

Results of the water supply and demand analysis for normal, single dry, and five-year consecutive droughts are shown in the following tables. The City expects to meet demands under all water year scenarios as shown in **Table 7-4** through **Table 7-6** and will continue to promote water conservation to ensure reliability and resiliency.

7.1.3.1 Water Service Reliability – Normal Year

The normal year water demands through 2045 are estimated based on the per capita water use targets summarized in **Chapter 4** and populations presented in **Chapter 3**. The projected normal water year water supply and demand projections are provided in **Table 7-4**. The available supplies during a normal year represent 58% SWP allocation, which allows the City to receive the full 1,313 AFY of SWP water allocated to the City, as described in **Section 7.1.1.1,** as well as 100% of the City's groundwater entitlement (assuming 70% efficiency in groundwater treatment).

Table 7-4. DWR 7-2R Normal Year Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals From Table 6-9R	3,151	3,151	3,151	3,151	3,151
Demand Totals From Table 4-3R	1,333	1,366	1,400	1,445	1,445
DIFFERENCE:	**1,818**	**1,785**	**1,751**	**1,706**	**1,706**

1. Supply included assumes stored SWP at the beginning of year 2025 is equivalent to stored SWP available to the City in 2021.

7.1.3.2 Water Service Reliability – Single Dry Year

The projected single dry year water demands through 2045 are based on the minimum SWP allocation which occurred in 2014. For years 2025 to 2045, the supply numbers include the addition of 407 AFY from groundwater production with treatment, as well as stored SWP. As shown in **Table 7-5**, the City's

supplies meet projected demands even during single-dry year conditions. Without the supplemental supply from groundwater and stored SWP water, the City can meet their demands by implementing additional conservation measures, implementing the WSCP, or utilizing IPR water as described in **Chapter 6**.

Table 7-5. DWR 7-3R Single Dry Year Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals From Table 6-9R	1,702	1,702	1,702	1,702	1,702
Demand Totals From Table 4-3R	1,333	1,366	1,400	1,445	1,445
DIFFERENCE:	**369**	**336**	**302**	**257**	**257**

1. Supply included assumes stored SWP at the beginning of year 2025 is equivalent to stored SWP available to the City in the third consecutive dry year. See Figure 7-1.

7.1.3.3 Water Service Reliability – Five Consecutive Dry Years

The projected consecutive dry year water demands through 2045 are based on the minimum 5-year average SWP allocations which occurred in years 2012-2016. The anticipated supply decrease during a multiple dry year period, compared to a normal year, is based on the actual water supply availabilities during the identified base years. All years include 407 AFY of groundwater as part of supply. During the third consecutive dry year, 1,115 AFY of stored SWP will be delivered from storage in addition to any available SWP and the baseline groundwater supply of 407 AFY in years 2025-2045. Because the City has the ability to store their unused SWP allocation in the San Luis Reservoir for later use during dry years, they can leverage this supply to meet demand when needed.

During the fourth consecutive dry year in 2045, 317 AFY of water from the IPR project (described in **Chapter 6**) will be pumped in addition to the baseline groundwater supply of 407 AFY in order to meet demands. As shown in **Table 7-6** and **Figure 7-1**, the City's supplies will meet the projected demands even during consecutive dry year conditions when supplemental supplies from groundwater and stored SWP are included. Without the supplemental supply from stored SWP or additional groundwater through IPR, the City can also adapt to reduced supplies by implementing conservation and/or the WSCP. **Figure 7-1** shows which supply would be utilized to meet demands during a 5-year consecutive drought-period if a five-consecutive year drought were to occur in 2045. Supply used to meet demands is characterized as supplies shown below the demand line in **Figure 7-1** in order of supply listed from bottom to top. For example, in the 3rd consecutive dry year the City envisions using all available SWP water first, then switching to available stored state water, and finally utilizing groundwater to meet any additional demands if available stored state water were to be depleted. In a drought year such as the 4th consecutive dry year, shown in **Figure 7-1**, the City may pump IPR water on an as needed basis to meet demands.

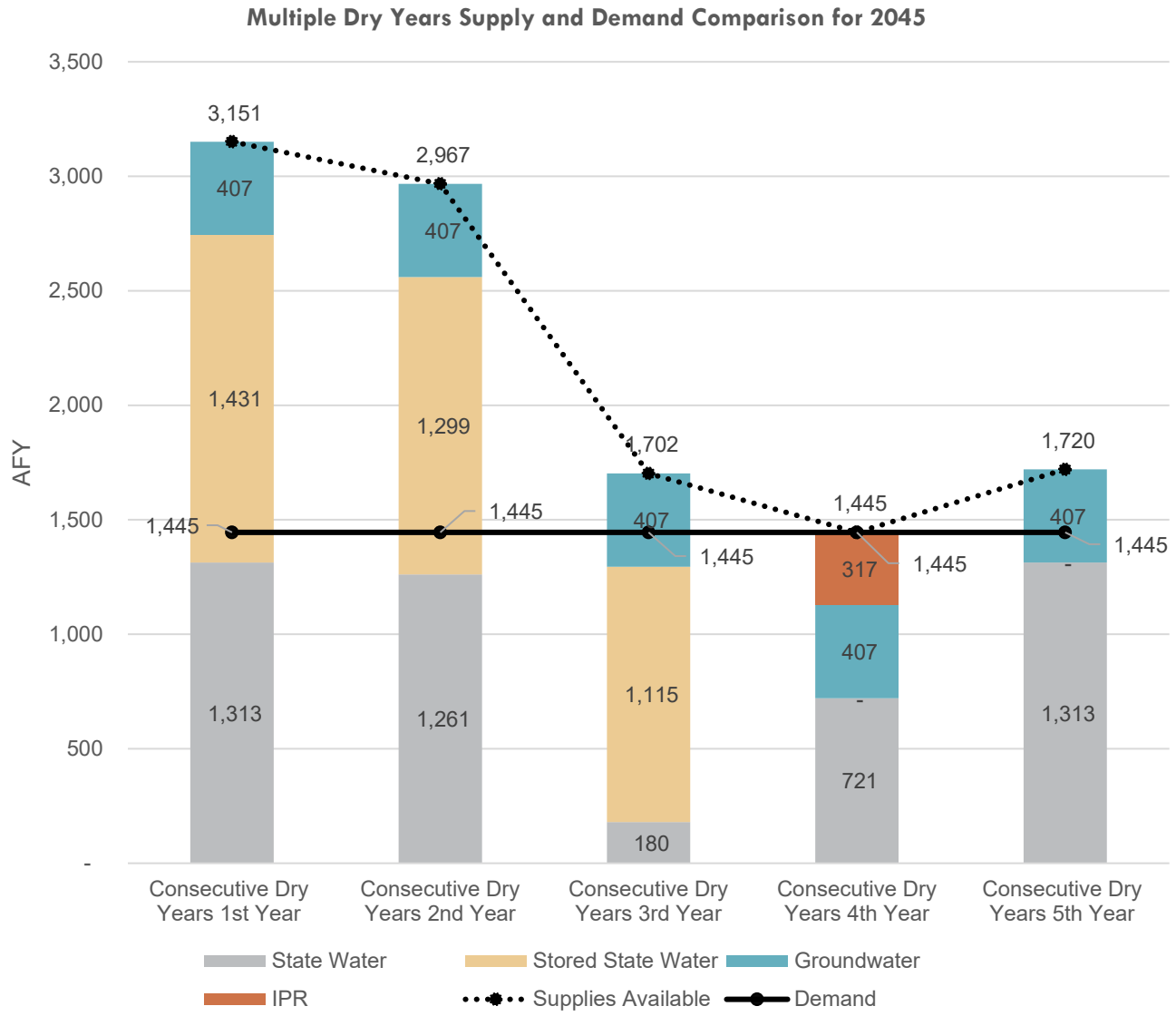

Figure 7-1: Water Service Reliability - Five Consecutive Dry Years

Table 7-6. DWR 7-4R Multiple Dry Years Supply and Demand Comparison

		2025	2030	2035	2040	2045
First Year	Supply Totals	3,151	3,151	3,151	3,151	3,151
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**1,818**	**1,785**	**1,751**	**1,706**	**1,706**
Second Year	Supply Totals	2,967	2,967	2,967	2,967	2,967
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**1,634**	**1,601**	**1,567**	**1,522**	**1,522**
Third Year	Supply Totals	1,702	1,702	1,702	1,702	1,702
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**369**	**336**	**302**	**257**	**257**
Fourth Year	Supply Totals	1,445	1,445	1,445	1,445	1,445
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**112**	**79**	**45**	**0**	**0**
Fifth Year	Supply Totals	1,720	1,720	1,720	1,720	1,720
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**387**	**354**	**320**	**275**	**275**
Sixth Year	Supply Totals	1,720	1,720	1,720	1,720	1,720
	Demand Totals	1,333	1,366	1,400	1,445	1,445
	DIFFERENCE:	**387**	**354**	**320**	**275**	**275**

1. Supply includes 407 AFY of Morro Valley Basin groundwater as well as SWP water.
2. Stored SWP was assumed to be equal to the quantity of stored SWP water available to the City at the beginning of 2021 of 1,431 AFY.
3. During the fourth consecutive dry year in 2045, 317 AFY of groundwater will be pumped via the IPR Project in addition to the baseline supply of 407 AFY.

7.1.4 Descriptions of Management Tools and Options

The City is currently working on a WRF to create a local and drought-resistant water supply. A key step to reducing imports will be to bolster local groundwater reliability by creating a seawater intrusion barrier and enhancing recharge to the groundwater basin. Additionally, improving water conservation and utilizing recycled water sources will allow the City to reduce its reliance on imported SWP demands. Additional information regarding the City's water conservation efforts is available in **Chapter 8** and **Appendix G**.

7.2 Drought Risk Assessment

New to the 2020 UWMP, CWC Section 10635 (b) now requires a 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 2020

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. If demands cannot be met by the expected available supply, shortage response actions from the City's WSCP may be implemented. Details about the City's WSCP are provided in **Chapter 8** and **Appendix G**.

7.2.1 Data, Methods, and Basis for Water Shortage Condition

The data, methods, and basis for a water shortage condition were identified using the DRA tool developed by DWR. The DRA looks at historical consumption data by customer class, populated from billing records, and historical supply data by source from production reports. Based on this data, historical consumption was projected based on population growth and was compared to the historical production during the consecutive dry base years (2012-2016). The drought risk assessment is based off historical data, however future conditions may alter supply availability assumptions. As additional climate change data becomes available the DRA will be updated in future iterations of the UWMP.

7.2.2 DRA Water Source Reliability

As described previously, the City does not anticipate any supply shortages within the next five years as shown in **Table 7-7**.

7.2.3 Total Water Supply and Use Comparison

Table 7-7 shows the City's projected supplies and demands if there are five consecutive dry years from 2021-2025. The City will be able to meet demand by utilizing their stored SWP water to address any deficits in the next 5 years. The City has the ability to store their unused SWP allocation in the San Luis Reservoir for later use during dry years. The City had 1,431 AFY of stored SWP water at the start of 2021 and will need to utilize stored SWP water if there is a five consecutive dry years starting in 2021. **Figure 7-2** shows supply, including stored SWP water, meeting the projected demand if the drought continues. Stored SWP calculations account for the framework that DWR has for storing SWP in San Luis Reservoir.

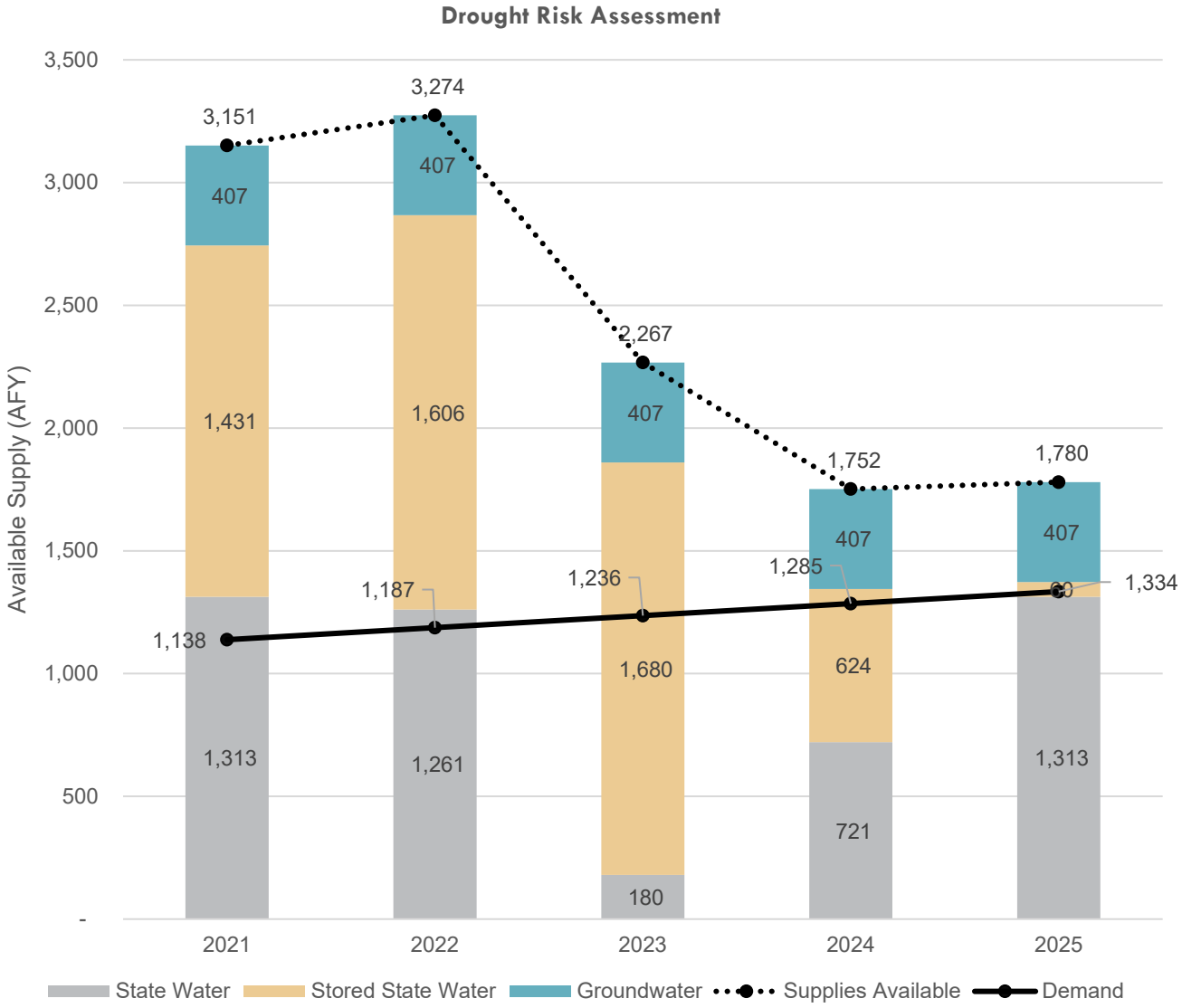

Figure 7-2. 2021–2025 Drought Risk Assessment, Supply and Demand Projections

Table 7-7. DWR 7-5 Five-Year Drought Risk Assessment to Address Water Code Section 10635(b)

2021	Gross Water Use	1,138
	Total Supplies	3,151
	Surplus/Shortfall without WSCP Action	2,013
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	2,013
	Resulting Percent Use Reduction from WSCP Action	0%
2022	Gross Water Use	1,187
	Total Supplies	3,274
	Surplus/Shortfall without WSCP Action	2,087
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	2,087
	Resulting Percent Use Reduction from WSCP Action	0%
2023	Gross Water Use	1,236
	Total Supplies	2,267
	Surplus/Shortfall without WSCP Action	1,031
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	1,031
	Resulting Percent Use Reduction from WSCP Action	0%
2024	Gross Water Use	1,285
	Total Supplies	1,752
	Surplus/Shortfall without WSCP Action	467
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	467
	Resulting Percent Use Reduction from WSCP Action	0%
2025	Gross Water Use	1,334
	Total Supplies	1,780
	Surplus/Shortfall without WSCP Action	446
	Planned WSCP Actions (Use Reduction and Supply Augmentation)	
	WSCP (Supply Augmentation Benefit)	0
	WSCP (Use Reduction Savings Benefit)	0
	Revised Surplus/Shortfall	446
	Resulting Percent Use Reduction from WSCP Action	0%

1. This meets DWR requirements and assessment of actual 2021 conditions and potential future dry conditions will be included in the Annual Assessment.

8

URBAN WATER MANAGEMENT PLAN

Water Shortage Contingency Plan

The WSCP is a detailed plan for how the City intends to predict and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply is reduced to a level that cannot support typical demand at any given time or reduction in demand is otherwise needed.

IN THIS SECTION

The WSCP is used to provide guidance to the City, staff, and the public by identifying anticipated shortages and response actions to allow for efficient management of any water shortage with predictability and accountability. The WSCP is a detailed proposal for how the City intends to act in the case of an actual water shortage condition. The WSCP is not intended to provide absolute direction but rather to provide options to manage water shortages. Official water shortage declarations by the City may include any combination of components described in the WSCP.

Water shortages can be triggered by a hydrologic limitation in supply (i.e., a prolonged period of below normal precipitation), limitations or failure of supply and treatment infrastructure, compliance with State mandates for water use efficiency, or a combination of conditions. Hydrologic or drought limitations tend to develop and abate more slowly, whereas infrastructure failure tends to happen quickly and relatively unpredictably. Water supplies may be interrupted or reduced significantly in several ways, such as during a drought that limits supplies, an earthquake that damages water delivery or storage facilities, a regional power outage, or a toxic spill that affects water quality.

This WSCP describes the following:

Water Supply Reliability Analysis: Summarizes the City's water supply analysis and reliability and identifies the 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.

Six Standard Shortage Levels: 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 level to reduce gaps between supply and demand as well as minimize social and economic impacts to the community.

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

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

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

Financial Consequences of WSCP Implementation: Describes the anticipated financial impact of implementing water shortage levels 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 shortage response actions should be adjusted.

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

Special Water Features Distinctions: Defines considerations and definitions for water use for decorative features versus pools and spas.

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

The WSCP is a standalone document that can be modified as needed and is included as **Appendix G**.

9

URBAN WATER MANAGEMENT PLAN

Demand Management Measures

This chapter provides a comprehensive description of the water conservation programs that the City has implemented for the past five years, is currently implementing, and plans to implement in order to meet the 2020 urban water use reduction targets.

IN THIS SECTION

- Existing Demand Management Measures
- Reporting Implementation
- Future Requirement

The section of the CWC addressing Demand Management Measures (DMMs) was significantly modified in 2014, based on recommendations from the Independent Technical Panel (ITP) to the legislature. The ITP was formed by DWR to provide information and recommendations to DWR and the Legislature on new DMMs, technologies and approaches to water use efficiency.

The ITP recommended, and the legislature enacted, streamlining the requirements from the 14 specific measures reported on in the 2010 UWMP to six more general requirements plus an "other" category for measures agencies implemented in addition to the required elements.

The required measures are summarized in **Table 9-1**. The City actively promotes public awareness and education of water supply sources and the public's role in conserving water and protecting shared resources. The City is committed to implementing cost effective programs that will increase water use efficiency throughout the service area.

Table 9-1. Demand Management Measures

	MEASURE
1	Water waste prevention ordinances
2	Metering
3	Conservation pricing
4	Public education and outreach
5	Programs to assess and manage distribution system real loss
6	Water conservation program coordination and staffing

Additional DMM implementation information is provided in the following sections.

9.1 Existing Demand Management Measures for Retail

Demand management is an integral part of sustainably managing water resources in California. Implementing water use DMMs that help lower demands can improve the water service reliability and help meet state and regional water conservation goals. Consistent with the requirements of the CWC, this section describes the demand measurement measures from **Table 9-1** that have been implemented in the past five years and will continue to be implemented into the future in order to meet the City's 2020 water use targets pursuant to CWC Section 10608.20.

The City recognizes that using water efficiently and minimizing water waste is an integral component of an effective water management strategy and is committed to providing education, tools, and incentives to help its customers understand and manage their water use. Water demand has already shown significant decline in the City's service area in recent years and the City's water demand in 2020 was 90 GPCD which exceeds the 2020 SB X7-7 target of 116 GPCD.

9.1.1 Water Waste Prevention Ordinances

According to the 2020 UWMP Guidebook, a water waste ordinance explicitly states the waste of water is to be prohibited. The ordinance may prohibit specific actions that waste water, such as excessive runoff from landscape irrigation, or use of a hose outdoors without a shut off nozzle. A water waste prevention ordinance is in place at all times and is not dependent on a water shortage for implementation. Executive Order B-37-16 "Making Water Conservation a California Way of Life" directed State agencies to update temporary emergency water restrictions and transition to permanent, long-term improvements in water use by taking actions and included using water more wisely and eliminating water waste.

As detailed in **Chapter 8** and **Appendix G**, the City restricts water waste through its municipal code ordinance which lists the prohibited uses of water supplied by the City and defines water waste. During water supply shortages, the City enforces these regulations through two processes. The code enforcement process and the Water Division work order process. If a code enforcement complaint is received it is logged and investigated. The Public Works Director has the ability after providing written warning to terminate water service. Additionally, a penalty can be assessed for excessive water use. If a complaint is received directly by the Water Division a work order is issued. Water Division staff then investigate the issue and if an actual water waste incident occurs, the case is forwarded to code enforcement.

The City Council may impose water rationing requirements as it deems appropriate in accordance with the municipal code. The City will declare a water shortage emergency as the City Council deems necessary and will coordinate with the County of San Luis Obispo and neighboring cities for the possible proclamation of a local emergency.

9.1.2 Metering

The City has fully implemented metering of its water system. The City requires that all long-term and short-term water connections be metered and maintains metering accuracy utilizing its meter replacement schedule. Meters are read once a month and are replaced if broken or unreadable. Additionally, the City flags zero read meters each month and checks them to ensure they are working correctly. While the City does not currently have smart meters, they may be considered in the future.

9.1.3 Conservation Pricing

According to the 2020 UWMP Guidebook, a conservation pricing structure is always in place and is not dependent on a water shortage for implementation. In addition, rates cannot be seen as penalties for excessive water use. Conservation pricing is designed to discourage wasteful water habits and encourage conservation. The City has fully implemented conservation pricing with its tiered water rate schedule. Customer water meters determine volumetric water use and customers are billed in accordance with the water rate structure. The tiered water rate schedule (higher unit cost with increased consumption) encourages water conservation. Water rates are available for customer review on the City's website (https://www.morro-bay.ca.us/97/Water-Sewer-Services).

9.1.4 Public Education and Outreach

The City implements an active conservation outreach program and raises awareness about water conservation through advertising, press releases, and media events and provides its customers with a water usage comparison on their water bills. Additionally, the City's website (www.morrobayca.gov/waterconservation) provides information related to programs, rebates, water saving tips and announcements about upcoming events. The City's rebate program was expanded in July 2015 to include Cash for Grass, rain barrel, smart irrigation controller, and irrigation retrofit rebates. The City also benefits from outreach programs provided through other neighboring agencies.

The City incorporates conservation minded articles routinely in its utility newsletters, public conservation notices, announcements at public meetings, and television advertisements on the public access channel. Additionally, the City provides water conservation materials to the local schools and at the Morro Bay Community Library. During severely restricted water supply conditions, the City provides restaurants with signage to only provide water upon request and provides hotels with "cling" stickers with a water conservation message for the bathroom mirrors.

9.1.5 Programs to Assess and Manage Distribution System Real Losses

The City recognizes the need to optimize local water resources, minimize the need for imported water, and discourage wasteful practices. The City conducts water audits, leak detection, and repairs on an ongoing basis. Through metering, the City closely monitors water production and consumption, and investigates any unaccounted-for water to determine water loss on a monthly basis. The City also began using the AWWA water audit software in 2016 to aid in monitoring system losses.

9.1.5.1 Construction Water Meters

The City has a program in which contractors are issued water meters by the City for use during construction. The contractors are required to use non-potable water during construction, as recorded by the issued water meters.

9.1.5.2 System Water Audits, Leak Detection

The City implements this program by conducting audits of water production and delivery records to determine any losses within the distribution/transmission system. By comparing the production amount and total deliveries to customers, an overall water balance is calculated to identify possible meter problems or to detect leaks. City staff actively determine the sources of water loss though the system and prioritize system repairs and replacements.

9.1.5.3 Leak Repair

The City's field staff regularly watches for water waste and leaks then notifies and works with customers to address the situation. Supervisors, customer service staff, meter readers, and the flushing/sampling crew inspect customer usage routinely for anomalies. Incidents of water waste are investigated and recommendations for correction are provided. Water sources are regulated and can be disconnected in cases of excessive leakage and/or facilities failure.

9.1.5.4 Pipeline Replacement

The City replaces pipelines on an as needed basis when leaks or insufficient pipelines are identified which has reduced pipeline water losses.

9.1.6 Water Conservation Program Coordination and Staffing Support

The City does not engage a designated Water Conservation Coordinator, but the job is fulfilled through the staffing in the City's Public Works Department. The City has designated the Public Works Director as the acting Water Conservation Coordinator and additional staff members in the department assist the Director in these duties.

9.1.7 Other Demand Management Measures

9.1.7.1 Residential Plumbing Retrofit

The City has been implementing this program through its retrofit upon sale ordinance, which requires sellers of residential properties in the City to retrofit existing toilets, faucets, and showerheads with aerators and low flow equipment prior to sale.

9.1.7.2 High Efficiency Washing Machine Rebate Program

Each residential address in the City is eligible for a rebate for the replacement of a standard or high water use washing machine with an approved energy efficient unit. Rebate applications can be found on the City's website and rebates are available in the amount of $100. The City's program began in 2015 and has provided 149 rebates totaling $14,900.

9.1.7.3 Residential Ultra-Low-Flush Toilet Replacement Programs

The City implements this rebate program as an incentive to replace existing standard flush toilets with ultra-low-flush toilets in single and multi-family residences. Rebates of up to $100 per retrofitted bathroom are provided to participants and a building inspector will need to inspect the property to verify the retrofit was done in order to receive the rebate. Compensation is limited to dual flush toilets. Applications can be found on the City's website. The City's program began in 2015 and has replaced 171 toilets for a total rebate amount of $17,100.

9.1.7.4 Cash for Grass Program

The City offers property owners a rebate program to help convert water-thirsty grass to water efficient landscaping at a rate of $0.50 per square foot. The minimum rebate amount is $100 (200 square feet of grass removed), and the maximum rebate amount offered is $500 (1,000 square feet or more removed). Applications can be found on the City's website or picked up in person at the Public Works office. The City's program began in 2015 and has removed 26,021 square feet of turf for 30 property owners. Rebates resulted in a total of $9,978 to property owners who elected to participate in the program.

9.1.7.5 Irrigation retrofit Rebate Program

The City offers a rebate incentive for homeowners to convert overhead sprinklers to drip irrigation. Customers will receive up to $0.25 per square foot of removed overhead sprinkler, with a minimum area removed of 200 square feet ($50) and a maximum of 400 square feet ($100). Rebate applications can be found on the City's website or picked up at the Public Services office. The City's program began in 2015 and has removed 1,400 square feet of overhead sprinklers resulting in a total rebate amount of $200 for two residents.

9.1.7.6 Smart Irrigation Controller Rebate Program

The City offers a rebate of up to $100 for customers who purchase irrigation controllers that automatically adjust irrigation scheduling based on the site and weather conditions. These controllers stop irrigating when it rains and applies water when it is dry and will automatically cycle and soak to reduce runoff on slopes. Customers will need to arrange pre-retrofit removal verification and post-retrofit removal inspections in order to receive the rebate. Rebate applications can be found on the City's website or picked up at the Public Works office. The City's program began in 2015 and a total of 4 controllers have been installed for a total rebate amount of $400.

9.1.7.7 Rain Barrel Rebate Program

The City offers a rebate of up to $50 to customers for the purchase of 50 gallon or more rain barrel. Customers will need to arrange pre-retrofit removal verification and post-retrofit removal inspections in order to receive the rebate. Rebate applications can be found on the City's website or picked up at the Public Works office. The City's program began in 2015 and 55 rain barrels have been purchased and installed for a total rebate amount of $2,750.

9.2 Reporting Implementation

Water conservation efforts over the past five years have included rebates to customers for water-efficient washing machines, toilet retrofits, cash for grass, irrigation retrofits, rain barrels and “SMART” irrigation controllers as noted in Section 9.1.7. Since rebate programs began in 2015, the City has provided over $45,000 to help residents conserve water.

9.2.1 Implementation Efforts to Achieve Water Use Targets

For decades, the City has valued and promoted conservation and will continue to do so. As a result, the City water use is below target objectives set by the State of California. Despite meeting the targets, the City will continue to implement existing conservation programs and explore additional programs to avoid substantial increases in demands.

9.3 Water Use Objectives (Future Requirements)

The City customers are efficient and have reduced their GPCD consumption to less than the State target. The City continues to promote conservation and will evaluate additional measures if and when future requirements are established.

10

URBAN WATER MANAGEMENT PLAN

Plan Adoption, Submittal, and Implementation

This chapter describes the steps taken to adopt and submit the UWMP and to make it publicly available. This chapter will also include a discussion of the agency's plan to implement the UWMP.

The 2020 UWMP and 2020 WSCP were prepared in a transparent manner that actively engaged stakeholders and the public to seek and distribute water use, supply, and reliability information to strengthen the City's ability to assess and plan for the City's water future. In addition, the UWMP and WSCP relied on existing policies and plans that previously involved stakeholders, cities, counties, water agencies, and the public to build on prior efforts and stakeholder engagement.

IN THIS SECTION

10.1 Inclusion of All 2020 Data

The City has included all requisite 2020 data in the development of this UWMP.

10.2 Notice of Public Hearing

10.2.1 Notice to Cities and Counties

CWC Section 10621(b) requires that suppliers notify the cities and counties in which they serve water that the UWMP and WSCP are being updated at least 60 days prior to the public hearing. To fulfill this requirement, on August 9, 2021, the City notified the County of San Luis Obispo of their intent to complete the 2020 UWMP, WSCP and amend the 2015 UWMP. The City also provided notification to SLOCOG and CCWA. Copies of the 60-day notification letters are included in **Appendix B**.

10.2.2 Notice to the Public

Per Government Code 6066, the City notified the public about the 2020 UWMP and WSCP public hearing once a week for two successive weeks in advance of the meeting in the San Luis Obispo Tribune. The public hearing was first noticed on September 28, 2021 and noticed again on October 5, 2021. Public hearing notifications were also sent to the same distribution list as the 60-day notifications via email. The hearing notices are attached as **Appendix B**. **Table 10-1** summarizes notifications provided by the City.

The City also made the UWMP and WSCP available for public review on September 28, 2021 and maintained a copy of the documents in their office and on the City website prior to the public hearing for review.

Table 10-1. DWR 10-1R Notifications

COUNTY	60 DAY NOTICE
County of San Luis Obispo	X
OTHER	**60 DAY NOTICE**
San Luis Obispo Council of Governments	X
Central Coast Water Authority	X

10.3 Public Hearing and Adoption

The 2020 UWMP, 2020 WSCP, and 2015 UWMP appendix were included as agenda items, noticed, and reviewed in a Public Hearing at the regularly scheduled City Council meeting on October 12, 2021. This hearing provided the agencies and members of the public a chance to comment on the Draft documents. The public hearing took place before the adoption allowing opportunity for the report to be modified in response to public input. The City Council adopted the 2020 UWMP, 2020 WSCP, and 2015 UWMP appendix on October 12, 2021. A copy of the City Council Resolution of Plan Adoption is included as **Appendix C**.

10.4 Plan Submittal

The 2020 UWMP, WSCP, and 2015 UWMP Appendix were submitted to DWR within 30 days of adoption using the DWR Water Use Efficiency (WUE) Data Portal. The documents were also submitted to the California State Library and to the County of San Luis Obispo within 30 days of adoption.

10.5 Public Availability

Commencing no later than within 30 days of adoption, the City will have a copy of the 2020 UWMP and WSCP available for public review at the City's office (see address below) during regular business hours. The final documents will also be posted on the City's website as noted below.

595 Harbor Street, Morro Bay, CA 93422

https://www.morro-bay.ca.us

10.6 Amending an Adopted UWMP or Water Shortage Contingency Plan

Amendments to the City's 2020 UWMP and WSCP will be made on an as needed basis. Table 10-2 outlines the general steps to adopt, submit, and/or amend the UWMP and/or WSCP.

Should the City need to amend the adopted 2020 UWMP or WSCP in the future, the City will hold a public hearing for review of the proposed amendments to the document. The City will send a 60-day notification letter to all cities and counties within the City's service area and notify the public in the same manner as set forth in this Chapter. Once the amended document is adopted, a copy of the final version will be sent to the California State Library, DWR (electronically using the WUEdata reporting tool), and San Luis Obispo County within 30 days of adoption. The final version will also be made available to the public both online on the City's website and in person at the City's office during normal business hours.

Table 10-2. Steps to Adopt, Submit and Implement the UWMP and WSCP

STEP	TASK	DESCRIPTION	TIMEFRAME
1	Notice to cities and counties	Notify cities and counties within the service area that the UWMP or WSCP is being updated. It is recommended that the notice includes: 1. Time and place of public hearing. 2. Location of the draft Plan, latest revision schedule, and contact information of the Plan preparer.	At least 60 days before public hearing. * If desired, advance notices can be issued without providing time and place of public hearing.
2	Publish Plan	Publish the draft UWMP or WSCP in advance of public hearing meeting	Recommended at least 2 weeks before public hearing.
3	Notice to the public	Publish two notifications of the public hearing in a local newspaper notice at least once a week for two consecutive weeks, with at least 5 days between publications. This notice must include: 1. Time and place of hearing. 2. Location of the draft UWMP or WSCP.	At least 2 weeks before public hearing. * Include a copy of public notices in plan.

STEP	TASK	DESCRIPTION	TIMEFRAME
4	Public hearing and optional adoption	Host at least one public hearing before adopting the UWMP or WSCP to: 1. Allow for community input. 2. Consider the economic impacts for complying with the Plan. **For UWMP only** As part of public hearing, 1. Provide information on the SBX7-7 baseline water use, target water use, compliance status, and implementation plan. 2. If needed, re-adopt a method for determining urban water use targets	Public hearing date * Adoption can be combined if public hearing is on the agenda before adoption
5	Adoption	Before submitting the UWMP or WSCP to DWR, the governing body must formally adopt it. An adoption resolution must be included, as an attachment or as a web address indicating where the adoption resolution can be found online.	At public hearing or at a later meeting. *The UWMP or WSCP can be adopted as prepared or as modified after the hearing.
6	Plan submittal	Submit the adopted or amended UWMP or WSCP via the WUE Data Portal within 30 days of adoption or by July 1, if updated with the UWMP five-year cycle.	Within 30 days of adoption or by July 1st, whichever comes first.
7	Plan availability	Submit a CD or hardcopy of the adopted UWMP or WSCP to the California State Library within 30 days of adoption. California State Library Government Publications Section Attention: Coordinator, Urban Water Management Plans P.O. Box 942837 Sacramento, CA 94237-0001 Provide a copy (hardcopy or electronic) of the adopted UWMP or WSCP to any cities and counties within the service area. Make the UWMP or WSCP available to the public by posting the Plan on website or making a hardcopy available for public review during normal business hours.	Within 30 days after adoption
9	Other - Notification to Public Utilities Commission	For water suppliers regulated by the California Public Utilities Commission submit UWMP and WSCP as part of the general rate case filing.	

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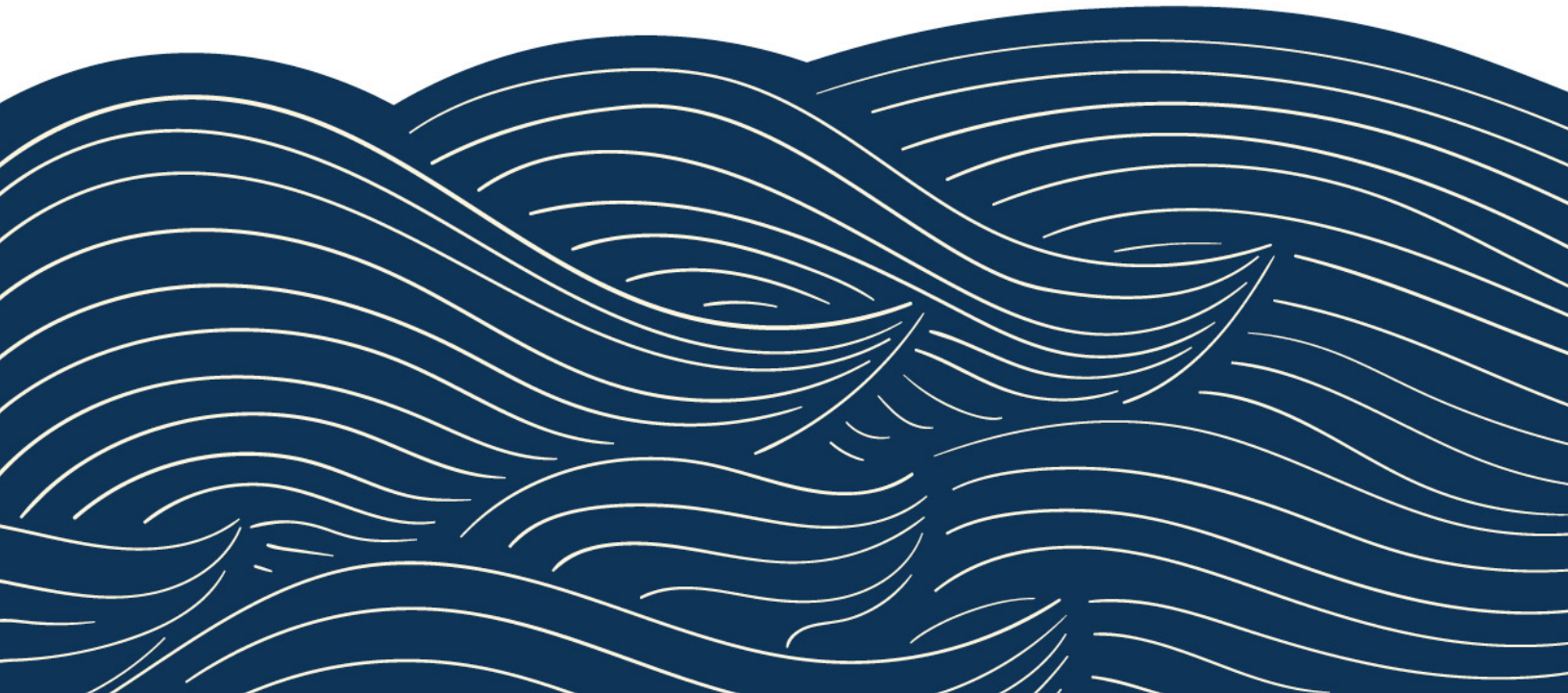
A

DWR Checklist



2020 Guidebook Location	Water Code Section	Summary as Applies to UWMP	Subject	2020 UWMP Location (Optional Column for Agency Review Use)
Chapter 1	10615	A plan shall describe and evaluate sources of supply, reasonable and practical efficient uses, reclamation and demand management activities.	Introduction and Overview	Chapter 1
Chapter 1	10630.5	Each plan shall include a simple description of the supplier's plan including water availability, future requirements, a strategy for meeting needs, and other pertinent information. Additionally, a supplier may also choose to include a simple description at the beginning of each chapter.	Summary	Chapter 1, Section 1.2 & Beginning of Each Chapter
Section 2.2	10620(b)	Every person that becomes an urban water supplier shall adopt an urban water management plan within one year after it has become an urban water supplier.	Plan Preparation	Not Applicable
Section 2.6	10620(d)(2)	Coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.	Plan Preparation	Chapter 2, Section 2.3
Section 2.6.2	10642	Provide supporting documentation that the water supplier has encouraged active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan and contingency plan.	Plan Preparation	Chapter 1, Section 1.3 & Chapter 2, Section 2.3
Section 2.6, Section 6.1	10631(h)	Retail suppliers will include documentation that they have provided their wholesale supplier(s) - if any - with water use projections from that source.	System Supplies	Chapter 2, Section 2.3 & Appendix B
Section 2.6	10631(h)	Wholesale suppliers will include documentation that they have provided their urban water suppliers with identification and quantification of the existing and planned sources of water available from the wholesale to the urban supplier during various water year types.	System Supplies	Not Applicable
Section 3.1	10631(a)	Describe the water supplier service area.	System Description	Chapter 3, Section 3.1
Section 3.3	10631(a)	Describe the climate of the service area of the supplier.	System Description	Chapter 3, Section 3.2
Section 3.4	10631(a)	Provide population projections for 2025, 2030, 2035, 2040 and optionally 2045.	System Description	Chapter 3, Section 3.3.1
Section 3.4.2	10631(a)	Describe other social, economic, and demographic factors affecting the supplier's water management planning.	System Description	Chapter 3, Section 3.3.2
Sections 3.4 and 5.4	10631(a)	Indicate the current population of the service area.	System Description and Baselines and Targets	Chapter 3, Section 3.3.1
Section 3.5	10631(a)	Describe the land uses within the service area.	System Description	Chapter 3, Section 3.4
Section 4.2	10631(d)(1)	Quantify past, current, and projected water use, identifying the uses among water use sectors.	System Water Use	Chapter 4, Section 4.2
Section 4.2.4	10631(d)(3)(C)	Retail suppliers shall provide data to show the distribution loss standards were met.	System Water Use	Chapter 4, Section 4.2.3
Section 4.2.6	10631(d)(4)(A)	In projected water use, include estimates of water savings from adopted codes, plans and other policies or laws.	System Water Use	Chapter 4, Section 4.2.4
Section 4.2.6	10631(d)(4)(B)	Provide citations of codes, standards, ordinances, or plans used to make water use projections.	System Water Use	Chapter 4, Section 4.2.4
Section 4.3.2.4	10631(d)(3)(A)	Report the distribution system water loss for each of the 5 years preceding the plan update.	System Water Use	Chapter 4, Section 4.2.3
Section 4.4	10631.1(a)	Include projected water use needed for lower income housing projected in the service area of the supplier.	System Water Use	Chapter 4, Section 4.3
Section 4.5	10635(b)	Demands under climate change considerations must be included as part of the drought risk assessment.	System Water Use	Chapter 4, Section 4.4; Chapter 6, Section 6.2.9; Chapter 7, Section 7.1.2; Chapter 7. Section 7.2
Chapter 5	10608.20(e)	Retail suppliers shall provide baseline daily per capita water use, urban water use target, interim urban water use target, and compliance daily per capita water use, along with the bases for determining those estimates, including references to supporting data.	Baselines and Targets	Chapter 5, Section 5.1 & Appendix E
Chapter 5	10608.24(a)	Retail suppliers shall meet their water use target by December 31, 2020.	Baselines and Targets	Chapter 5, Section 5.2 & Appendix E
Section 5.1	10608.36	Wholesale suppliers shall include an assessment of present and proposed future measures, programs, and policies to help their retail water suppliers achieve targeted water use reductions.	Baselines and Targets	Not Applicable
Section 5.2	10608.24(d)(2)	If the retail supplier adjusts its compliance GPCD using weather normalization, economic adjustment, or extraordinary events, it shall provide the basis for, and data supporting the adjustment.	Baselines and Targets	Not Applicable
Section 5.5	10608.22	Retail suppliers' per capita daily water use reduction shall be no less than 5 percent of base daily per capita water use of the 5 year baseline. This does not apply if the suppliers base GPCD is at or below 100.	Baselines and Targets	Chapter 5, Section 5.1 & Appendix E

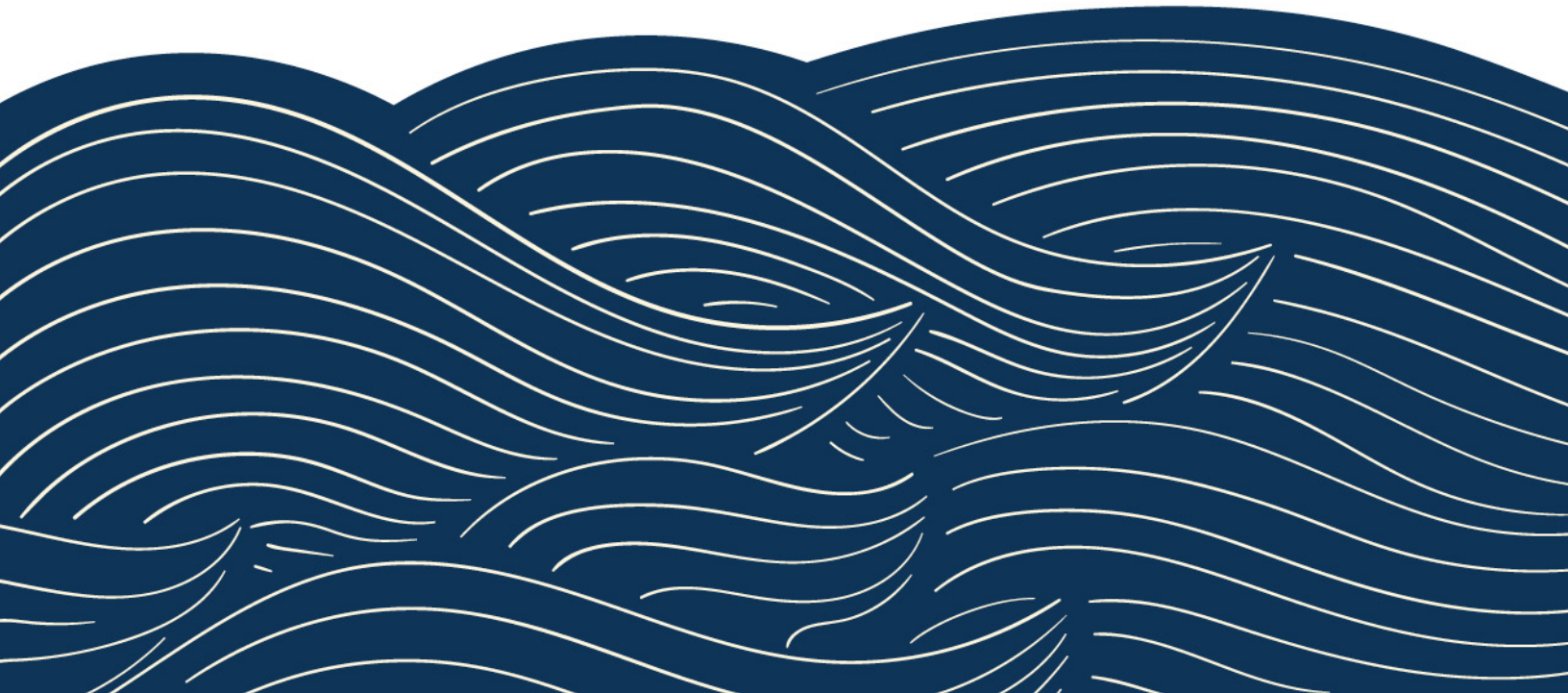
Section 5.5 and Appendix E	10608.4	Retail suppliers shall report on their compliance in meeting their water use targets. The data shall be reported using a standardized form in the SBX7-7 2020 Compliance Form.	Baselines and Targets	Chapter 5, Section 5.2 & Appendix E
Sections 6.1 and 6.2	10631(b)(1)	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.	System Supplies	Chapter 6, Section 6.2 & Chapter 7
Sections 6.1	10631(b)(1)	Provide a discussion of anticipated supply availability under a normal, single dry year, and a drought lasting five years, as well as more frequent and severe periods of drought, *including changes in supply due to climate change.*	System Supplies	Chapter 6, & Chapter 7
Section 6.1	10631(b)(2)	When multiple sources of water supply are identified, describe the management of each supply in relationship to other identified supplies.	System Supplies	Chapter 6, Section 6.2
Section 6.1.1	10631(b)(3)	Describe measures taken to acquire and develop planned sources of water.	System Supplies	Chapter 6, Section 6.2.5
Section 6.2.8	10631(b)	Identify and quantify the existing and planned sources of water available for 2020, 2025, 2030, 2035, 2040 and optionally 2045.	System Supplies	Chapter 6, Section 6.1
Section 6.2	10631(b)	Indicate whether groundwater is an existing or planned source of water available to the supplier.	System Supplies	Chapter 6, 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 water supplier or if there is any other specific authorization for groundwater management. Include a copy of the plan or authorization.	System Supplies	Chapter 6, Section 6.2.2 & Appendix H
Section 6.2.2	10631(b)(4)(B)	Describe the groundwater basin.	System Supplies	Chapter 6, 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.	System Supplies	Chapter 6, Section 6.2.2
Section 6.2.2.1	10631(b)(4)(B)	For unadjudicated basins, indicate whether or not the department has identified the basin as a high or medium priority. Describe efforts by the supplier to coordinate with sustainability or groundwater agencies to achieve sustainable groundwater conditions.	System Supplies	Chapter 6, Section 6.2.2
Section 6.2.2.4	10631(b)(4)(C)	Provide a detailed description and analysis of the location, amount, and sufficiency of groundwater pumped by the urban water supplier for the past five years	System Supplies	Chapter 6, 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.	System Supplies	Chapter 6, Section 6.1
Section 6.2.7	10631(c)	Describe the opportunities for exchanges or transfers of water on a short-term or long- term basis.	System Supplies	Chapter 6, Section 6.2.7
Section 6.2.5	10633(b)	Describe the quantity of treated wastewater that meets recycled water standards, is being discharged, and is otherwise available for use in a recycled water project.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.5	10633(c)	Describe the recycled water currently being used in the supplier's service area.	System Supplies (Recycled Water)	Chapter 6, 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.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.5	10633(e)	Describe the projected use of recycled water within the supplier's service area at the end of 5, 10, 15, and 20 years, and a description of the actual use of recycled water in comparison to uses previously projected.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.5	10633(f)	Describe the actions which may be taken to encourage the use of recycled water and the projected results of these actions in terms of acre-feet of recycled water used per year.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.5	10633(g)	Provide a plan for optimizing the use of recycled water in the supplier's service area.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.6	10631(g)	Describe desalinated water project opportunities for long-term supply.	System Supplies	Chapter 6, Section 6.2.6
Section 6.2.5	10633(a)	Describe the wastewater collection and treatment systems in the supplier's service area with quantified amount of collection and treatment and the disposal methods.	System Supplies (Recycled Water)	Chapter 6, Section 6.2.5
Section 6.2.8, Section 6.3.7	10631(f)	Describe the expected future water supply projects and programs that may be undertaken by the water supplier to address water supply reliability in average, single-dry, and for a period of drought lasting 5 consecutive water years.	System Supplies	Chapter 6, Section 6.2.8
Section 6.4 and Appendix O	10631.2(a)	The UWMP must include energy information, as stated in the code, that a supplier can readily obtain.	System Suppliers, Energy Intensity	Chapter 6, Section 6.3
Section 7.2	10634	Provide information on the quality of existing sources of water available to the supplier and the manner in which water quality affects water management strategies and supply reliability	Water Supply Reliability Assessment	Chapter 7, Section 7.1.1
Section 7.2.4	10620(f)	Describe water management tools and options to maximize resources and minimize the need to import water from other regions.	Water Supply Reliability Assessment	Chapter 7, Section 7.1.1
Section 7.3	10635(a)	Service Reliability Assessment: Assess the water supply reliability during normal, dry, and a drought lasting five consecutive water years by comparing the total water supply sources available to the water supplier with the total projected water use over the next 20 years.	Water Supply Reliability Assessment	Chapter 7

Section 7.3	10635(b)	Provide a drought risk assessment as part of information considered in developing the demand management measures and water supply projects.	Water Supply Reliability Assessment	Chapter 7, Section 7.2
Section 7.3	10635(b)(1)	Include a description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts 5 consecutive years.	Water Supply Reliability Assessment	Chapter 7, Section 7.2
Section 7.3	10635(b)(2)	Include a determination of the reliability of each source of supply under a variety of water shortage conditions.	Water Supply Reliability Assessment	Chapter 7, Section 7.2
Section 7.3	10635(b)(3)	Include a comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.	Water Supply Reliability Assessment	Chapter 7
Section 7.3	10635(b)(4)	Include considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.	Water Supply Reliability Assessment	Chapter 7
Chapter 8	10632(a)	Provide a water shortage contingency plan (WSCP) with specified elements below.	Water Shortage Contingency Planning	Chapter 8 & Appendix G
Chapter 8	10632(a)(1)	Provide the analysis of water supply reliability (from Chapter 7 of Guidebook) in the WSCP	Water Shortage Contingency Planning	Appendix G, Section 1.1
Section 8.10	10632(a)(10)	Describe reevaluation and improvement procedures for monitoring and evaluation the water shortage contingency plan to ensure risk tolerance is adequate and appropriate water shortage mitigation strategies are implemented.	Water Shortage Contingency Planning	Appendix G, Section 1.2, 1.9, 1.10
Section 8.2	10632(a)(2)(A)	Provide the written decision-making process and other methods that the supplier will use each year to determine its water reliability.	Water Shortage Contingency Planning	Appendix G, Section 1.2
Section 8.2	10632(a)(2)(B)	Provide data and methodology to evaluate the supplier's water reliability for the current year and one dry year pursuant to factors in the code.	Water Shortage Contingency Planning	Appendix G, Section 1.2
Section 8.3	10632(a)(3)(A)	Define six standard water shortage levels of 10, 20, 30, 40, 50 percent shortage and greater than 50 percent shortage. These levels shall be based on supply conditions, including percent reductions in supply, changes in groundwater levels, changes in surface elevation, or other conditions. The shortage levels shall also apply to a catastrophic interruption of supply.	Water Shortage Contingency Planning	Appendix G, Section 1.3
Section 8.3	10632(a)(3)(B)	Suppliers with an existing water shortage contingency plan that uses different water shortage levels must cross reference their categories with the six standard categories.	Water Shortage Contingency Planning	Appendix G, Section 1.3
Section 8.4	10632(a)(4)(A)	Suppliers with water shortage contingency plans that align with the defined shortage levels must specify locally appropriate supply augmentation actions.	Water Shortage Contingency Planning	Appendix G, Section 1.4.2
Section 8.4	10632(a)(4)(B)	Specify locally appropriate demand reduction actions to adequately respond to shortages.	Water Shortage Contingency Planning	Appendix G, Section 1.4
Section 8.4	10632(a)(4)(C)	Specify locally appropriate operational changes.	Water Shortage Contingency Planning	Appendix G, Section 1.4.3
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.	Water Shortage Contingency Planning	Appendix G, Section 1.4.4
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.	Water Shortage Contingency Planning	Appendix G, Section 1.4.1
Section 8.4.6	10632.5	The plan shall include a seismic risk assessment and mitigation plan.	Water Shortage Contingency Plan	Appendix G, Section 1.4.6
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.	Water Shortage Contingency Planning	Appendix G, Section 1.5
Section 8.5 and 8.6	10632(a)(5)(B) 10632(a)(5)(C)	Suppliers must describe that they will inform customers, the public and others regarding any shortage response actions triggered or anticipated to be triggered and other relevant communications.	Water Shortage Contingency Planning	Appendix G, Section 1.5
Section 8.6	10632(a)(6)	Retail supplier must describe how it will ensure compliance with and enforce provisions of the WSCP.	Water Shortage Contingency Planning	Appendix G, Section 1.6
Section 8.7	10632(a)(7)(A)	Describe the legal authority that empowers the supplier to enforce shortage response actions.	Water Shortage Contingency Planning	Appendix G, Section 1.7
Section 8.7	10632(a)(7)(B)	Provide a statement that the supplier will declare a water shortage emergency Water Code Chapter 3.	Water Shortage Contingency Planning	Appendix G, Section 1.7; and Chapter 9, Section 9.1.1
Section 8.7	10632(a)(7)(C)	Provide a statement that the supplier will coordinate with any city or county within which it provides water for the possible proclamation of a local emergency.	Water Shortage Contingency Planning	Appendix G, Section 1.7; and Chapter 9, Section 9.1.1
Section 8.8	10632(a)(8)(A)	Describe the potential revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Appendix G, Section 1.8
Section 8.8	10632(a)(8)(B)	Provide a description of mitigation actions needed to address revenue reductions and expense increases associated with activated shortage response actions.	Water Shortage Contingency Planning	Appendix G, Section 1.8

Section 8.8	10632(a)(8)(C)	Retail suppliers must describe the cost of compliance with Water Code Chapter 3.3: Excessive Residential Water Use During Drought	Water Shortage Contingency Planning	Appendix G, Section 1.8
Section 8.9	10632(a)(9)	Retail suppliers must describe the monitoring and reporting requirements and procedures that ensure appropriate data is collected, tracked, and analyzed for purposes of monitoring customer compliance.	Water Shortage Contingency Planning	Appendix G, Section 1.9
Section 8.11	10632(b)	Analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas.	Water Shortage Contingency Planning	Appendix G, Section 1.11
Sections 8.12 and 10.4	10635(c)	Provide supporting documentation that Water Shortage Contingency Plan has been, or will be, provided to any city or county within which it provides water, no later than 30 days after the submission of the plan to DWR.	Plan Adoption, Submittal, and Implementation	Appendix G, Section 1.12; Chapter 10
Section 8.14	10632(c)	Make available the Water Shortage Contingency Plan to customers and any city or county where it provides water within 30 after adopted the plan.	Water Shortage Contingency Planning	Appendix G, Section 1.12; Chapter 10
Sections 9.1 and 9.3	10631(e)(2)	Wholesale suppliers shall describe specific demand management measures listed in code, their distribution system asset management program, and supplier assistance program.	Demand Management Measures	Not Applicable
Sections 9.2 and 9.3	10631(e)(1)	Retail suppliers shall provide a description of the nature and extent of each demand management measure implemented over the past five years. The description will address specific measures listed in code.	Demand Management Measures	Chapter 9, Section 9.1
Chapter 10	10608.26(a)	Retail suppliers shall conduct a public hearing to discuss adoption, implementation, and economic impact of water use targets (recommended to discuss compliance).	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.3; Appendix G, Section 1.12
Section 10.2.1	10621(b)	Notify, at least 60 days prior to the public hearing, any city or county within which the supplier provides water that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. Reported in Table 10-1.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.2
Section 10.4	10621(f)	Each urban water supplier shall update and submit its 2020 plan to the department by July 1, 2021.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.4; Appendix G, Section 1.12
Sections 10.2.2, 10.3, and 10.5	10642	Provide supporting documentation that the urban water supplier made the plan and contingency plan available for public inspection, published notice of the public hearing, and held a public hearing about the plan and contingency plan.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 5; Appendix B
Section 10.2.2	10642	The water supplier is to provide the time and place of the hearing to any city or county within which the supplier provides water.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.2; Appendix B
Section 10.3.2	10642	Provide supporting documentation that the plan and contingency plan has been adopted as prepared or modified.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.4; Appendix G, Section 1.12; Appendix C
Section 10.4	10644(a)	Provide supporting documentation that the urban water supplier has submitted this UWMP to the California State Library.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.4
Section 10.4	10644(a)(1)	Provide supporting documentation that the urban water supplier has submitted this UWMP to any city or county within which the supplier provides water no later than 30 days after adoption.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.5
Sections 10.4.1 and 10.4.2	10644(a)(2)	The plan, or amendments to the plan, submitted to the department shall be submitted electronically.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.4
Section 10.5	10645(a)	Provide supporting documentation that, not later than 30 days after filing a copy of its plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.5
Section 10.5	10645(b)	Provide supporting documentation that, not later than 30 days after filing a copy of its water shortage contingency plan with the department, the supplier has or will make the plan available for public review during normal business hours.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.5
Section 10.6	10621(c)	If supplier is regulated by the Public Utilities Commission, include its plan and contingency plan as part of its general rate case filings.	Plan Adoption, Submittal, and Implementation	Not Applicable
Section 10.7.2	10644(b)	If revised, submit a copy of the water shortage contingency plan to DWR within 30 days of adoption.	Plan Adoption, Submittal, and Implementation	Chapter 10, Section 10.6

B

Notifications



CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

8/09/2021

John Diodati
County of San Luis Obispo/ San Luis Obispo County Flood Control and Water Conservation District
1050 Monterey St. (Room 206)
San Luis Obispo, CA 93408

Delivered via Email

CITY OF MORRO BAY – NOTICE OF PREPARATION OF THE 2020 URBAN WATER MANAGEMENT PLAN, WATER SHORTAGE CONTINGENCY PLAN AND APPENDIX TO THE 2015 URBAN WATER MANAGEMENT PLAN

Dear John Diodati,

The City of Morro Bay (City) is in the process of preparing and updating its 2020 Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) in compliance with the Urban Water Management Planning Act. An update of the City's UWMP is required every five (5) years. In addition, the City is preparing an Appendix to both the 2020 UWMP and the 2015 UWMP to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The 2015 UWMP is being amended only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the WSCP.

Water Code section 10621(b) requires an urban water supplier updating its UWMP and WSCP to notify cities and counties within its service area of the update at least sixty (60) days prior to holding a public hearing thereby encouraging public involvement and agency coordination. This letter serves as the City's notice that it is preparing and updating its 2020 UWMP, WSCP, and amending its 2015 UWMP.

A copy of City's draft 2020 UWMP and WSCP will be available for review on the City's website in fall of 2021, and the City will subsequently hold a noticed public hearing on the 2020 UWMP, WSCP and Appendix to the 2015 UWMP in advance of its proposed adoption. The City invites you to submit comments and consult with the City regarding its UWMP and WSCP.

The City's website (https://www.morrobayca.gov/water) will give updates on the 2020 UWMP, WSCP, and 2015 UWMP amendment. If you have any questions, comments, or input regarding these documents, please contact Damaris Hanson, Environmental Programs Manager, via email at dhanson@morrobayca.gov or by phone at (805)772-6265.

Sincerely,

Damaris Hanson
Environmental Programs Manager
City of Morro Bay

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

8/09/2021

John Brady
Central Coast Water Authority
255 Industrial Way
Buellton, CA 93427

Delivered via Email

CITY OF MORRO BAY – NOTICE OF PREPARATION OF THE 2020 URBAN WATER MANAGEMENT PLAN, WATER SHORTAGE CONTINGENCY PLAN AND APPENDIX TO THE 2015 URBAN WATER MANAGEMENT PLAN

Dear John Brady,

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Sincerely,

Damaris Hanson
Environmental Programs Manager
City of Morro Bay

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

8/09/2021

Peter Rodgers
San Luis Obispo Council of Governments
114 Marsh Street
San Luis Obispo, CA 93041

Delivered via Email

CITY OF MORRO BAY – NOTICE OF PREPARATION OF THE 2020 URBAN WATER MANAGEMENT PLAN, WATER SHORTAGE CONTINGENCY PLAN AND APPENDIX TO THE 2015 URBAN WATER MANAGEMENT PLAN

Dear Peter Rodgers,

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Sincerely,

Damaris Hanson
Environmental Programs Manager
City of Morro Bay

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

9/28/2021

John Diodati
County of San Luis Obispo/ San Luis Obispo County Flood Control and Water Conservation District
1050 Monterey St. (Room 206)
San Luis Obispo, CA 93408

Delivered via Email

City of Morro Bay - 2020 Urban Water Management Plan, Water Shortage Contingency Plan and Appendix to the 2015 Urban Water Management Plan Notice of Public Hearing

Dear John Diodati,

Notice is hereby given that a virtual public hearing will be held by the City of Morro Bay (City) on **October 12, 2021** at 5:30 p.m., as part of a regularly scheduled City Council meeting. (https://www.morro-bay.ca.us/archive.aspx)

The public hearing will be held to receive public comments and consider adoption of the Draft 2020 Urban Water Management Plan (2020 UWMP) and Draft Water Shortage Contingency Plan (WSCP), which have been prepared in compliance with the Urban Water Management Planning Act. The Draft 2020 UWMP is a long-range planning document that assesses current water demand, projects future demand over a minimum 20-year planning horizon and identifies water resources and conservation efforts to meet future demand. The Draft WSCP contains details on the City's water shortage contingency planning and shortage response actions.

In addition, the City will receive public comments and consider adoption of a Draft Appendix to the 2015 UWMP to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The Draft Appendix to the 2015 UWMP, which is also included as Appendix F in the 2020 UWMP, is being adopted only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the WSCP.

Following the public hearing, the City may adopt the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix with recommended modifications as a result of public input.

A copy of the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix will be available for public review beginning on September 28, 2021 on the City's website (www.morrobayca.gov/2020UWMP). Please contact the City if you require special accommodations.

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

Please provide written comments on the Draft Plans via email at Cityclerk@morrobayca.gov no later than October 12, 2021. If you have any questions regarding the draft documents or the public hearing meeting, please contact Damaris Hanson via phone at (805) 772-6265 or via email (dhanson@morrobayca.gov).

Sincerely,

Damaris Hanson
Acting Utilities Manager
City of Morro Bay

CITY OF MORRO BAY

PUBLIC WORKS DEPARTMENT

955 Shasta Avenue
Morro Bay, CA 93442

9/28/2021

John Brady
Central Coast Water Authority
255 Industrial Way
Buellton, CA 93427

Delivered via Email

City of Morro Bay - 2020 Urban Water Management Plan, Water Shortage Contingency Plan and Appendix to the 2015 Urban Water Management Plan Notice of Public Hearing

Dear John Brady,

Notice is hereby given that a virtual public hearing will be held by the City of Morro Bay (City) on **October 12, 2021** at 5:30 p.m., as part of a regularly scheduled City Council meeting. (https://www.morro-bay.ca.us/archive.aspx)

The public hearing will be held to receive public comments and consider adoption of the Draft 2020 Urban Water Management Plan (2020 UWMP) and Draft Water Shortage Contingency Plan (WSCP), which have been prepared in compliance with the Urban Water Management Planning Act. The Draft 2020 UWMP is a long-range planning document that assesses current water demand, projects future demand over a minimum 20-year planning horizon and identifies water resources and conservation efforts to meet future demand. The Draft WSCP contains details on the City's water shortage contingency planning and shortage response actions.

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A copy of the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix will be available for public review beginning on September 28, 2021 on the City's website (www.morrobayca.gov/2020UWMP). Please contact the City if you require special accommodations.

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

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Sincerely,

Damaris Hanson
Acting Utilities Manager
City of Morro Bay

CITY OF MORRO BAY

PUBLIC WORKS DEPARTMENT

955 Shasta Avenue
Morro Bay, CA 93442

9/28/2021

Peter Rodgers
San Luis Obispo Council of Governments
114 Marsh Street
San Luis Obispo, CA 93041

Delivered via Email

City of Morro Bay - 2020 Urban Water Management Plan, Water Shortage Contingency Plan and Appendix to the 2015 Urban Water Management Plan Notice of Public Hearing

Dear Peter Rodgers,

Notice is hereby given that a virtual public hearing will be held by the City of Morro Bay (City) on **October 12, 2021** at 5:30 p.m., as part of a regularly scheduled City Council meeting. (https://www.morro-bay.ca.us/archive.aspx)

The public hearing will be held to receive public comments and consider adoption of the Draft 2020 Urban Water Management Plan (2020 UWMP) and Draft Water Shortage Contingency Plan (WSCP), which have been prepared in compliance with the Urban Water Management Planning Act. The Draft 2020 UWMP is a long-range planning document that assesses current water demand, projects future demand over a minimum 20-year planning horizon and identifies water resources and conservation efforts to meet future demand. The Draft WSCP contains details on the City's water shortage contingency planning and shortage response actions.

In addition, the City will receive public comments and consider adoption of a Draft Appendix to the 2015 UWMP to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The Draft Appendix to the 2015 UWMP, which is also included as Appendix F in the 2020 UWMP, is being adopted only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the WSCP.

Following the public hearing, the City may adopt the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix with recommended modifications as a result of public input.

A copy of the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix will be available for public review beginning on September 28, 2021 on the City's website (www.morrobayca.gov/2020UWMP). Please contact the City if you require special accommodations.

CITY OF MORRO BAY
PUBLIC WORKS DEPARTMENT
955 Shasta Avenue
Morro Bay, CA 93442

Please provide written comments on the Draft Plans via email at Cityclerk@morrobayca.gov no later than October 12, 2021. If you have any questions regarding the draft documents or the public hearing meeting, please contact Damaris Hanson via phone at (805) 772-6265 or via email (dhanson@morrobayca.gov).

Sincerely,

Damaris Hanson
Acting Utilities Manager
City of Morro Bay

McClatchy

Beaufort Gazette
Belleville News-Democrat
Bellingham Herald
Bradenton Herald
Centre Daily Times
Charlotte Observer
Columbus Ledger-Enquirer
Fresno Bee
The Herald - Rock Hill
Herald Sun - Durham
Idaho Statesman
Island Packet
Kansas City Star
Lexington Herald-Leader
Merced Sun-Star
Miami Herald
el Nuevo Herald - Miami
Modesto Bee
Raleigh News & Observer
The Olympian
Sacramento Bee
Fort Worth Star-Telegram
The State - Columbia
Sun Herald - Biloxi
Sun News - Myrtle Beach
The News Tribune Tacoma
The Telegraph - Macon
San Luis Obispo Tribune
Tri-City Herald
Wichita Eagle

AFFIDAVIT OF PUBLICATION

Account #	Order Number	Identification	Order PO	Amount	Cols	Depth
36013	142752	Print Legal Ad - IPL0042691	Public Hrg. Damaris	$310.98	1	72 L

Attention: Nancy Hubbard

CITY OF MORRO BAY
595 HARBOR ST
MORRO BAY, CA 93442

Public Hearing Notice
City of Morro Bay - 2020 Urban Water Management Plan, Water Shortage Contingency Plan, and Appendix to the 2015 Urban
Water Management Plan

Notice is hereby given that a virtual Public Hearing will be held by the City of Morro Bay (City) on **October 12, 2021,** at 5:30 p.m., as part of a regularly scheduled City Council meeting https://www.morro-bay.ca.us/archive.aspx

The City Council will conduct a public hearing to receive public comments and consider adoption of the Draft 2020 Urban Water Management Plan (2020 UWMP) and Draft Water Shortage Contingency Plan (WSCP), which have been prepared in compliance with the Urban Water Management Planning Act. The Draft 2020 UWMP is a long-range planning document that assesses current water demand, projects future demand over a minimum 20-year planning horizon and identifies water resources and conservation efforts to meet future demand. The Draft WSCP contains details on the City's water shortage contingency planning and shortage response actions.

In addition, the City will receive public comments and consider adoption of a Draft Appendix to the 2015 UWMP to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (California Code Reg., tit.23, §5003). The Draft Appendix to the 2015 UWMP, which is also included as Appendix F in the 2020 UWMP, is being adopted only to report reduced reliance on the Delta and this action is separate from adoption of the 2020 UWMP and adoption of the WSCP.

Following the public hearing, the city may adopt the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix with recommended modifications as a result of public input.

A copy of the Draft 2020 UWMP, Draft WSCP and Draft 2015 UWMP Appendix will be available for public review beginning on September 28, 2021 on the City's website (www.morrobayca.gov/2020UWMP) in advance of the Public Hearing. Please contact the city if you require special accommodations.

Please provide written comments on the Draft Plans via email at Cityclerk@morrobayca.gov no later than October 12, 2021. If you have any questions regarding the draft documents or the public hearing meeting, please contact Damaris Hanson via phone at (805) 772-6265 or via email (dhanson@morrobayca.gov).

IPL0042691
Sep 28,Oct 5 2021

In The Superior Court of The State of California
In and for the County of San Luis Obispo

No. of Insertions: 2
Beginning Issue of: 09/28/2021
Ending Issue of: 10/05/2021

Jane E. Durrand

Legals Clerk

STATE OF TEXAS)
SS
County of Dallas)

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen and not interested in the above entitled matter; I am now, and at all times embraced in the publication herein mentioned was, the principal clerk of the printers and publishers of The Tribune, a newspaper of general Circulation, printed and published daily at the City of San Luis Obispo in the above named county and state; that notice at which the annexed clippings is a true copy, was published in the above-named newspaper and not in any supplement thereof - on the following dates to wit; From 09/28/2021 To 10/05/2021 that said newspaper was duly and regularly ascertained and established a newspaper of general circulation by Decree entered in the Superior Court of San Luis Obispo County, State of California, on June 9, 1952, Case #19139 under the Government Code of the State of California.

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Amanda Grisham

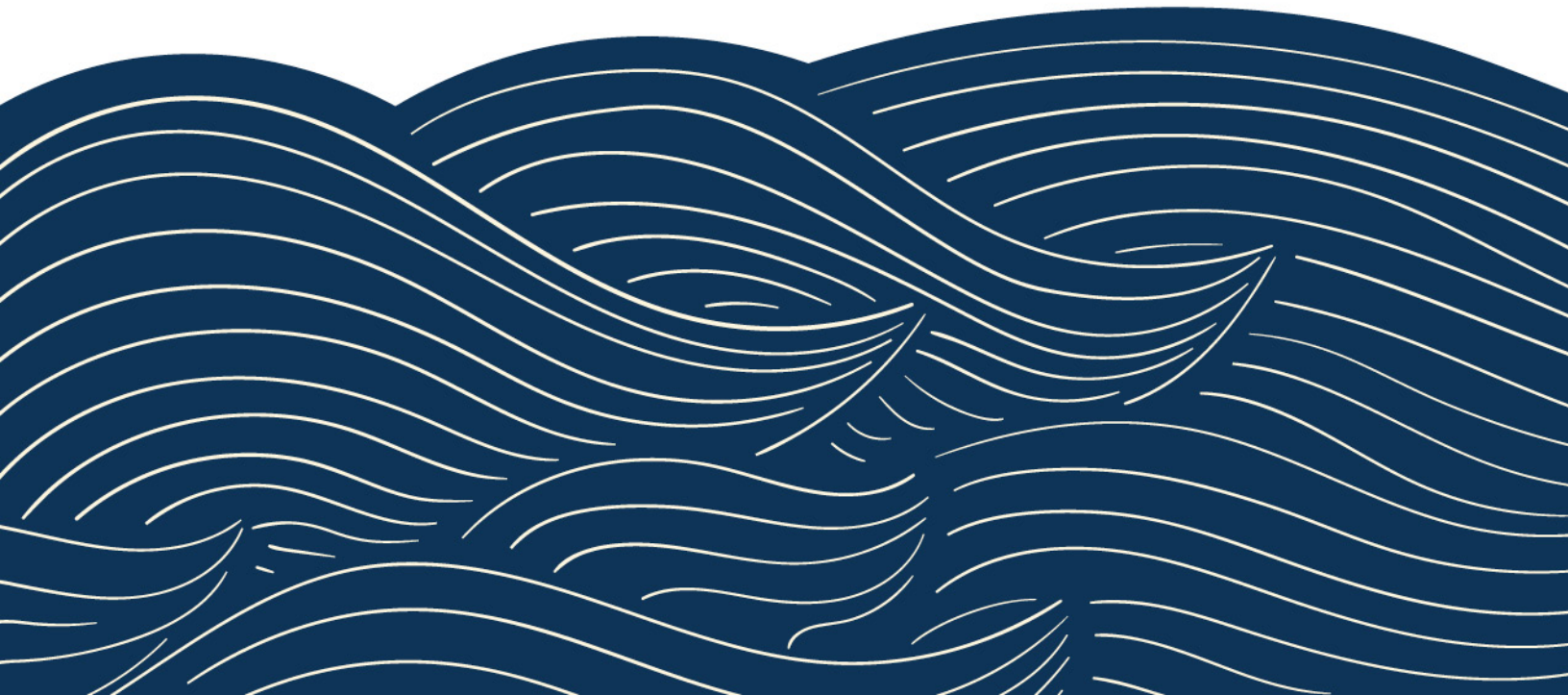
Notary Public in and for the state of Texas, residing in Dallas County

AMANDA DAWN GRISHAM
My Notary ID # 132031326
Expires May 30, 2023

Extra charge for lost or duplicate affidavits.
Legal document please do not destroy!

C

Resolutions



RESOLUTION NO. 66-21

**RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF MORRO BAY, CALIFORNIA
ADOPTING THE 2020 URBAN WATER MANAGEMENT PLAN**

**THE CITY COUNCIL
City of Morro Bay, California**

WHEREAS, the California Urban Water Management Planning Act, Water Code Section 10610 et seq. (the Act), mandates that every urban supplier of water providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan; and

WHEREAS, the Act requires periodic review and update of the Urban Water Management Plan ("UWMP") every five years; and

WHEREAS, the City of Morro Bay City Council has reviewed the 2020 UWMP, determined that the 2020 UWMP is consistent with the Act and the California Department of Water Resources 2020 UWMP Guidebook, and is an accurate representation of the water system, current and projected water uses, sources of water, water supply reliability, water shortage contingency planning and demand management measures; and

WHEREAS, on August 9, 2021 the City of Morro Bay issued a notice of preparation of the Draft 2020 UWMP for review and comment; and

WHEREAS, on September 28, 2021 the City of Morro Bay issued a notice of public hearing and availability of the Draft 2020 UWMP for review and comment; and

WHEREAS, on October 12, 2021 the Morro Bay City Council conducted a public hearing pursuant to California Water Code sections 10642 and 10608.26 to consider and receive input on the Draft 2020 UWMP; and

WHEREAS, all prerequisites to adoption of the UWMP have occurred.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Morro Bay, California

1. The facts set forth in the Recitals are true and correct.

2. The UWMP www.morrobayca.gov/2020UWMP is adopted as the City's 2020 Urban Water Management Plan.

3. The City Manager is authorized and directed to implement the attached UWMP.

4. The City Manager shall cause periodic reviews of the attached UWMP to occur, consistent with the Act, and shall present to the City Council any changes or amendments deemed necessary or appropriate in accordance with the Act.

5. The Council finds and determines that, under the California Water Code Section 10652, the adoption of the UWMP and this resolution does not constitute a project under the California Environmental Quality Act.

6. The City Clerk is directed to file a certified copy of the attached UWMP with the California State Department of Water Resources ("DWR") and take all other necessary further administrative action for adoption of the UWMP.

7. This resolution shall take effect immediately upon its adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Morro Bay at a regular meeting thereof held on the 12th day of October 2021 by the following vote:

AYES: Heller, Addis, Barton, Ford, Heller
NOES: None
ABSENT: None

JOHN HEADDING, Mayor

ATTEST:

DANA SWANSON, City Clerk

RESOLUTION NO. 67-21

**RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF MORRO BAY, CALIFORNIA
ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN**

**THE CITY COUNCIL
City of Morro Bay, California**

WHEREAS, the California Urban Water Management Planning Act, Water Code Section 10610 et seq. (the Act), mandates that every urban supplier of water providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan (UWMP); and

WHEREAS, as part of the UWMP, Water Code section 10632 requires urban water suppliers to prepare and adopt a Water Shortage Contingency Plan (WSCP); and

WHEREAS, the City of Morro Bay meets the Act's definition of an urban retail water supplier required to submit an UWMP and WSCP; and

WHEREAS, a WSCP is a standalone document that is created separately from the UWMP and included as part of the UWMP; and

WHEREAS, on August 9, 2021, the City of Morro Bay issued a notice of preparation of the Draft 2020 UWMP and WSCP for review and comment; and

WHEREAS, on September 28, 2021 the City of Morro Bay issued a notice of public hearing and availability of the Draft 2020 UWMP and WSCP for review and comment; and

WHEREAS, on October 12, 2021 the Morro Bay City Council conducted a public hearing pursuant to California Water Code sections 10642 and 10608.26 to consider and receive input on the Draft 2020 UWMP and WSCP; and

WHEREAS, all prerequisites to adoption of the WSCP have occurred.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Morro Bay, California:

1. The facts set forth in the Recitals are true and correct.

2. The City hereby adopts the 2020 WSCP www.morrobayca.gov/WSCP , for the City of Morro Bay and authorizes it to be filed with the California Department of Water Resources.

3. The Council finds and determines that, under the California Water Code Section 10652, the adoption of the WSCP and this resolution does not constitute a project under the California Environmental Quality Act.

4. The City Clerk is directed to file a certified copy of the attached WSCP with the California State Department of Water Resources and take all other necessary further administrative action for adoption of the WSCP.

5. This resolution shall take effect immediately upon its adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Morro Bay at a regular meeting thereof held on the 12th day of October 2021 by the following vote:

AYES: Headding, Addis, Barton, Ford, Heller
NOES: None
ABSENT: None

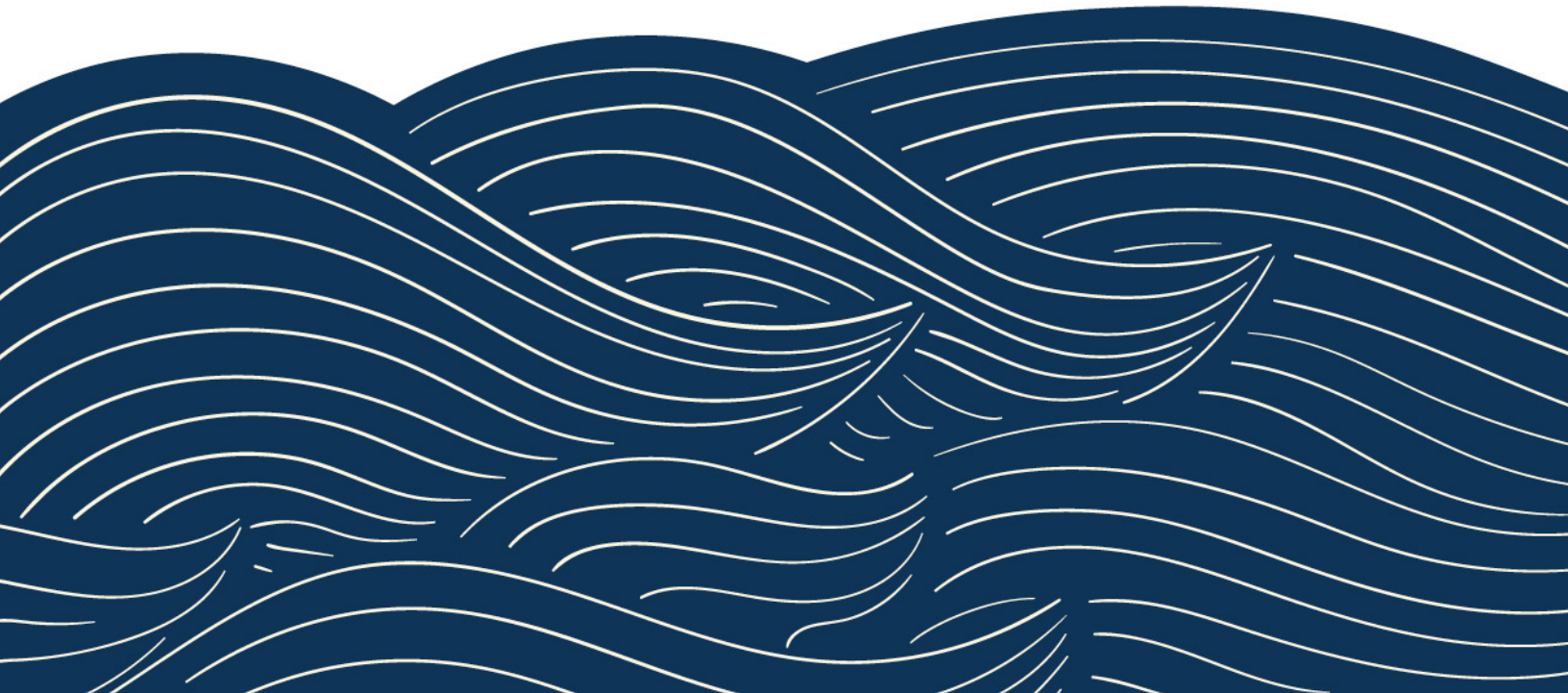
JOHN HEADDING, Mayor

ATTEST:

DANA SWANSON, City Clerk

D

AWWA Water Loss Audits



AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0
American Water Works Association

? Click to access definition
+ Click to add a comment

Water Audit Report for: City of Morro Bay (4010011)
Reporting Year: 2016 1/2016 - 12/2016

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	3	36.204	acre-ft/yr	3			acre-ft/yr
Water imported:	7	960.850	acre-ft/yr	4			acre-ft/yr
Water exported:	n/a	0.000	acre-ft/yr				acre-ft/yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 997.054 acre-ft/yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	3	977.697	acre-ft/yr			
Billed unmetered:	n/a	0.000	acre-ft/yr			
Unbilled metered:	n/a	0.000	acre-ft/yr			
Unbilled unmetered:	5	2.493	acre-ft/yr		2.493	acre-ft/yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: 980.190 acre-ft/yr

WATER LOSSES (Water Supplied - Authorized Consumption) 16.864 acre-ft/yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		2.493	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	9.876	acre-ft/yr	1.00%		acre-ft/yr
Systematic data handling errors:	5	2.444	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 14.813 acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 2.052 acre-ft/yr

WATER LOSSES: 16.864 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: 19.357 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	72.0	miles
Number of active AND inactive service connections:	9	5,478	
Service connection density:		76	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 1 65.0 psi

COST DATA

Total annual cost of operating water system:	10	$4,235,000	$/Year	
Customer retail unit cost (applied to Apparent Losses):	9	$11.21	$/100 cubic feet (ccf)	
Variable production cost (applied to Real Losses):	5	$2,565.92	$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 62 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Water imported
2: Billed metered
3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0
American Water Works Association

? Click to access definition
+ Click to add a comment

Water Audit Report for: City of Morro Bay (4010011)
Reporting Year: 2017 1/2017 - 12/2017

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

						Pcnt:	Value:	
Volume from own sources:	3	106.353	acre-ft/yr	3	0.00%			acre-ft/yr
Water imported:	7	924.825	acre-ft/yr	3	0.00%			acre-ft/yr
Water exported:	n/a	0.000	acre-ft/yr					acre-ft/yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 1,031.178 acre-ft/yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	3	1,003.673	acre-ft/yr			
Billed unmetered:	n/a	0.000	acre-ft/yr			
Unbilled metered:	n/a	0.000	acre-ft/yr			
Unbilled unmetered:	5	2.578	acre-ft/yr		2.578	acre-ft/yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: 1,006.251 acre-ft/yr

WATER LOSSES (Water Supplied - Authorized Consumption) 24.927 acre-ft/yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		2.578	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	10.138	acre-ft/yr	1.00%		acre-ft/yr
Systematic data handling errors:	5	2.509	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 15.225 acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 9.702 acre-ft/yr

WATER LOSSES: 24.927 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: 27.505 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	72.0	miles
Number of active AND inactive service connections:	9	5,478	
Service connection density:		76	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 1 65.0 psi

COST DATA

Total annual cost of operating water system:	10	$5,479,700	$/Year	
Customer retail unit cost (applied to Apparent Losses):	9	$11.21	$/100 cubic feet (ccf)	
Variable production cost (applied to Real Losses):	5	$2,985.10	$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 61 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Water imported
2: Billed metered
3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0
American Water Works Association

? Click to access definition
+ Click to add a comment

Water Audit Report for: City of Morro Bay (4010011)
Reporting Year: 2018 | 1/2018 - 12/2018

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

Master Meter and Supply Error Adjustments

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Pcnt:	Value:	
Volume from own sources:	3	92.630	acre-ft/yr	3	0.00%		acre-ft/yr
Water imported:	7	960.340	acre-ft/yr	3	0.00%		acre-ft/yr
Water exported:	n/a	0.000	acre-ft/yr				acre-ft/yr

Enter negative % or value for under-registration
Enter positive % or value for over-registration

WATER SUPPLIED: 1,052.970 acre-ft/yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	3	1,008.650	acre-ft/yr			
Billed unmetered:	n/a	0.000	acre-ft/yr			
Unbilled metered:	n/a	0.000	acre-ft/yr			
Unbilled unmetered:	5	2.630	acre-ft/yr		2.630	acre-ft/yr

Use buttons to select percentage of water supplied **OR** value

AUTHORIZED CONSUMPTION: ? 1,011.280 acre-ft/yr

WATER LOSSES (Water Supplied - Authorized Consumption) 41.690 acre-ft/yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		2.632	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	10.188	acre-ft/yr	1.00%		acre-ft/yr
Systematic data handling errors:	5	2.522	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: ? 15.342 acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: ? 26.347 acre-ft/yr

WATER LOSSES: 41.690 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: ? 44.320 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	77.0	miles
Number of active AND inactive service connections:	5	5,502	
Service connection density:		71	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure: 1 65.0 psi

COST DATA

Total annual cost of operating water system:	10	$5,469,556	$/Year	
Customer retail unit cost (applied to Apparent Losses):	9	$15.31	$/100 cubic feet (ccf)	
Variable production cost (applied to Real Losses):	5	$2,169.69	$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 60 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Water imported
2: Billed metered
3: Customer metering inaccuracies

AWWA Free Water Audit Software:
Reporting Worksheet

WAS v5.0

American Water Works Association

? Click to access definition

+ Click to add a comment

Water Audit Report for: City of Morro Bay (4010011)

Reporting Year: 2019 1/2019 - 12/2019

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

WATER SUPPLIED

<---------- Enter grading in column 'E' and 'J' ---------->

					Master Meter and Supply Error Adjustments		
					Pcnt:	Value:	
Volume from own sources:	3	101.272	acre-ft/yr	3	0.25%		acre-ft/yr
Water imported:	7	968.480	acre-ft/yr	3	0.25%		acre-ft/yr
Water exported:	n/a	0.000	acre-ft/yr				acre-ft/yr

Enter negative % or value for under-registration

Enter positive % or value for over-registration

WATER SUPPLIED: 1,067.084 acre-ft/yr

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:	
Billed metered:	3	951.104	acre-ft/yr			
Billed unmetered:	n/a	0.000	acre-ft/yr			
Unbilled metered:	n/a		acre-ft/yr			
Unbilled unmetered:	5	13.339	acre-ft/yr	1.25%		acre-ft/yr

Default option selected for Unbilled unmetered - a grading of 5 is applied but not displayed

AUTHORIZED CONSUMPTION: 964.443 acre-ft/yr

Use buttons to select percentage of water supplied **OR** value

WATER LOSSES (Water Supplied - Authorized Consumption) 102.642 acre-ft/yr

Apparent Losses

				Pcnt:	Value:	
Unauthorized consumption:		2.668	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	3	9.607	acre-ft/yr	1.00%		acre-ft/yr
Systematic data handling errors:	5	2.378	acre-ft/yr	0.25%		acre-ft/yr

Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed

Apparent Losses: 14.653 acre-ft/yr

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 87.989 acre-ft/yr

WATER LOSSES: 102.642 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: 115.980 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	77.0	miles
Number of active AND inactive service connections:	3	5,530	
Service connection density:		72	conn./mile main

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: (length of service line, beyond the property boundary, that is the responsibility of the utility)

Average length of customer service line has been set to zero and a data grading score of 10 has been applied

Average operating pressure:	5	65.0	psi

COST DATA

Total annual cost of operating water system:	10	$8,812,645	$/Year	
Customer retail unit cost (applied to Apparent Losses):	9	$16.24	$/100 cubic feet (ccf)	
Variable production cost (applied to Real Losses):	5	$2,660.60	$/acre-ft	☐ Use Customer Retail Unit Cost to value real losses

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 60 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

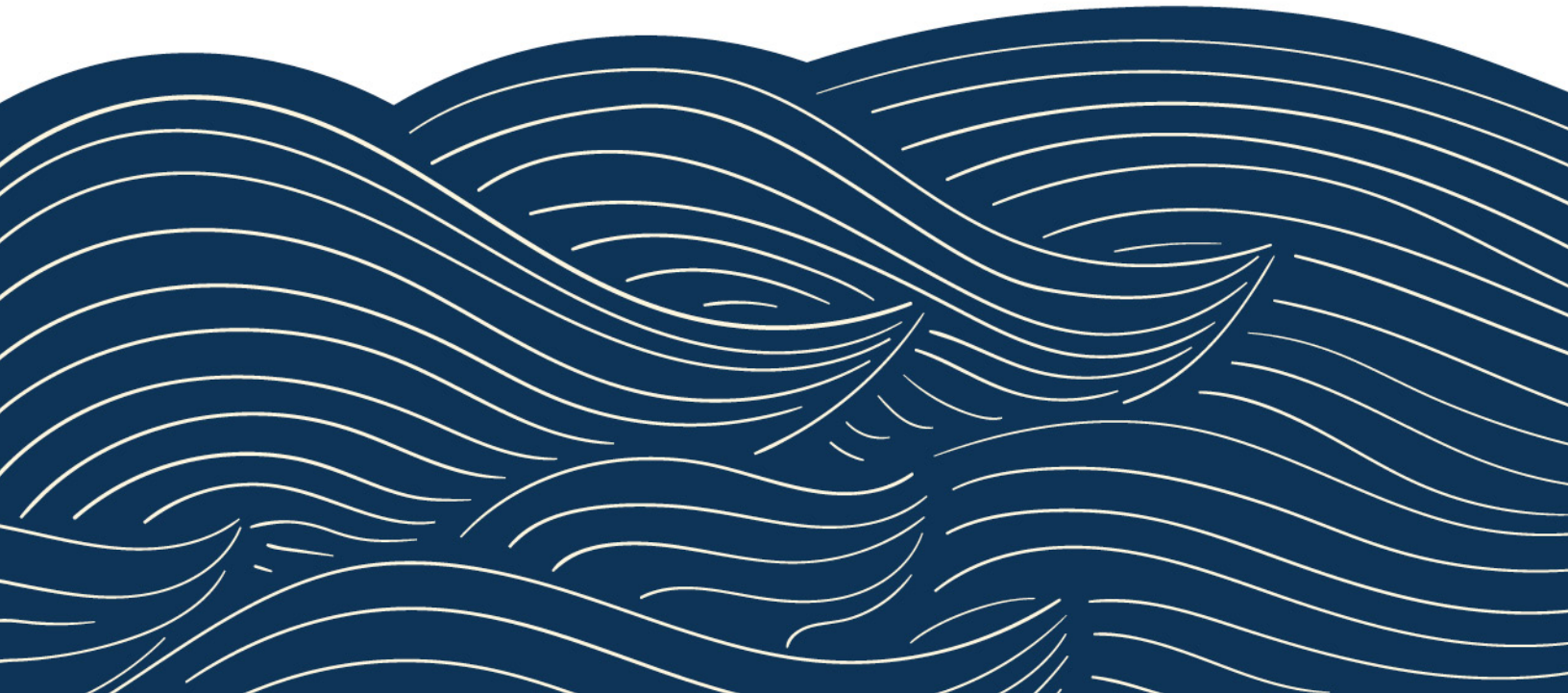
1: Water imported

2: Billed metered

3: Customer metering inaccuracies

E

SB X7-7 Verification and Compliance



SB X7-7 Table 0: Units of Measure Used in UWMP* *(select one from the drop down list)*
Acre Feet
**The unit of measure must be consistent with Table 2-3*
NOTES:

SB X7-7 Table-1: Baseline Period Ranges			
Baseline	**Parameter**	**Value**	**Units**
10- to 15-year baseline period	2008 total water deliveries	13,060	Acre Feet
	2008 total volume of delivered recycled water	-	Acre Feet
	2008 recycled water as a percent of total deliveries	0.00%	Percent
	Number of years in baseline period[1, 2]	10	Years
	Year beginning baseline period range	1995	
	Year ending baseline period range[3]	2004	
5-year baseline period	Number of years in baseline period	5	Years
	Year beginning baseline period range	2003	
	Year ending baseline period range[4]	2007	

[1] If the 2008 recycled water percent is less than 10 percent, then the first baseline period is a continuous 10-year period. If the amount of recycled water delivered in 2008 is 10 percent or greater, the first baseline period is a continuous 10- to 15-year period. *[2] The Water Code requires that the baseline period is between 10 and 15 years. However, DWR recognizes that some water suppliers may not have the minimum 10 years of baseline data.*

[3] The ending year must be between December 31, 2004 and December 31, 2010.

[4] The ending year must be between December 31, 2007 and December 31, 2010.

NOTES:

SB X7-7 Table 2: Method for Population Estimates	
Method Used to Determine Population (may check more than one)	
☐	**1. Department of Finance** (DOF) DOF Table E-8 (1990 - 2000) and (2000-2010) and DOF Table E-5 (2011 - 2015) when available
☐	**2. Persons-per-Connection Method**
☑	**3. DWR Population Tool**
☐	**4. Other** DWR recommends pre-review
NOTES:	

SB X7-7 Table 3: Service Area Population		
Year		**Population**
10 to 15 Year Baseline Population		
Year 1	1995	9,748
Year 2	1996	9,657
Year 3	1997	9,824
Year 4	1998	9,904
Year 5	1999	9,994
Year 6	2000	10,176
Year 7	2001	10,196
Year 8	2002	10,231
Year 9	2003	10,220
Year 10	2004	10,315
Year 11		
Year 12		
Year 13		
Year 14		
Year 15		
5 Year Baseline Population		
Year 1	2003	10,220
Year 2	2004	10,315
Year 3	2005	10,374
Year 4	2006	10,354
Year 5	2007	10,448
2015 Compliance Year Population		
2015		10,224
NOTES:		

SB X7-7 Table 4: Annual Gross Water Use *

Baseline Year *Fm SB X7-7 Table 3*		Volume Into Distribution System *This column will remain blank until SB X7-7 Table 4-A is completed.*	Deductions					Annual Gross Water Use
			Exported Water	Change in Dist. System Storage (+/-)	Indirect Recycled Water *This column will remain blank until SB X7-7 Table 4-B is completed.*	Water Delivered for Agricultural Use	Process Water *This column will remain blank until SB X7-7 Table 4-D is completed.*	
10 to 15 Year Baseline - Gross Water Use								
Year 1	1995	1,406			-		-	1,406
Year 2	1996	1,501			-		-	1,501
Year 3	1997	1,535			-		-	1,535
Year 4	1998	1,326			-		-	1,326
Year 5	1999	1,393			-		-	1,393
Year 6	2000	1,400			-		-	1,400
Year 7	2001	1,410			-		-	1,410
Year 8	2002	1,454			-		-	1,454
Year 9	2003	1,421			-		-	1,421
Year 10	2004	1,477			-		-	1,477
Year 11	0	-			-		-	-
Year 12	0	-			-		-	-
Year 13	0	-			-		-	-
Year 14	0	-			-		-	-
Year 15	0	-			-		-	-
10 - 15 year baseline average gross water use								**1,432**
5 Year Baseline - Gross Water Use								
Year 1	2003	1,421			-		-	1,421
Year 2	2004	1,477			-		-	1,477
Year 3	2005	1,361			-		-	1,361
Year 4	2006	1,371			-		-	1,371
Year 5	2007	1,446			-		-	1,446
5 year baseline average gross water use								**1,415**
2015 Compliance Year - Gross Water Use								
2015		1,090	-		-		-	**1,090**

* NOTE that the units of measure must remain consistent throughout the UWMP, as reported in Table 2-3

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution System(s)

Complete one table for each source.

Name of Source	Chorro Basin
This water source is:	
☐	The supplier's own water source
☑	A purchased or imported source

Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1995	986		986
Year 2	1996	1,261		1,261
Year 3	1997	985		985
Year 4	1998	38		38
Year 5	1999	34		34
Year 6	2000	4		4
Year 7	2001	11		11
Year 8	2002	1		1
Year 9	2003	1		1
Year 10	2004	49		49
Year 11	0			-
Year 12	0			-
Year 13	0			-
Year 14	0			-
Year 15	0			-
5 Year Baseline - Water into Distribution System				
Year 1	2003	1		1
Year 2	2004	49		49
Year 3	2005	204		204
Year 4	2006	257		257
Year 5	2007	276		276
2015 Compliance Year - Water into Distribution System				
2015		-		-

** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

SB X7-7 Table 4-A: Volume Entering the Distribution				
Name of Source	Morro Basin			
This water source is:				
☑	The supplier's own water source			
☐	A purchased or imported source			
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1,995	420		420
Year 2	1,996	240		240
Year 3	1,997	249		249
Year 4	1,998	0		0
Year 5	1,999	0		0
Year 6	2,000	0		0
Year 7	2,001	0		0
Year 8	2,002	32		32
Year 9	2,003	28		28
Year 10	2,004	213		213
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Baseline - Water into Distribution System				
Year 1	2,003	28		28
Year 2	2,004	213		213
Year 3	2,005	150		150
Year 4	2,006	80		80
Year 5	2,007	35		35
2015 Compliance Year - Water into Distribution System				
2015		0		0
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution				
Name of Source	R/O Plant - Treated brackish groundwater			
This water source is:				
☑	The supplier's own water source			
☐	A purchased or imported source			
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1,995	0		0
Year 2	1,996	0		0
Year 3	1,997	0		0
Year 4	1,998	0		0
Year 5	1,999	0		0
Year 6	2,000	0		0
Year 7	2,001	0		0
Year 8	2,002	48		48
Year 9	2,003	13		13
Year 10	2,004	10		10
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Baseline - Water into Distribution System				
Year 1	2,003	13		13
Year 2	2,004	10		10
Year 3	2,005	0		0
Year 4	2,006	25		25
Year 5	2,007	19		19
2015 Compliance Year - Water into Distribution System				
2015		138		138
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*				
NOTES:				

SB X7-7 Table 4-A: Volume Entering the Distribution				
Name of Source	State Water			
This water source is:				
☐	The supplier's own water source			
☑	A purchased or imported source			
Baseline Year *Fm SB X7-7 Table 3*		Volume Entering Distribution System	Meter Error Adjustment* *Optional (+/-)*	Corrected Volume Entering Distribution System
10 to 15 Year Baseline - Water into Distribution System				
Year 1	1,995	0		0
Year 2	1,996	0		0
Year 3	1,997	301		301
Year 4	1,998	1288		1,288
Year 5	1,999	1359		1,359
Year 6	2,000	1396		1,396
Year 7	2,001	1399		1,399
Year 8	2,002	1373		1,373
Year 9	2,003	1379		1,379
Year 10	2,004	1205		1,205
Year 11	-			0
Year 12	-			0
Year 13	-			0
Year 14	-			0
Year 15	-			0
5 Year Baseline - Water into Distribution System				
Year 1	2,003	1379		1,379
Year 2	2,004	1205		1,205
Year 3	2,005	1007		1,007
Year 4	2,006	1009		1,009
Year 5	2,007	1116		1,116
2015 Compliance Year - Water into Distribution System				
2015		952		952
** Meter Error Adjustment - See guidance in Methodology 1, Step 3 of Methodologies Document*				
NOTES:				

SB X7-7 Table 5: Gallons Per Capita Per Day (GPCD)				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Annual Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use (GPCD)
10 to 15 Year Baseline GPCD				
Year 1	1995	9,748	1,406	129
Year 2	1996	9,657	1,501	139
Year 3	1997	9,824	1,535	139
Year 4	1998	9,904	1,326	120
Year 5	1999	9,994	1,393	124
Year 6	2000	10,176	1,400	123
Year 7	2001	10,196	1,410	123
Year 8	2002	10,231	1,454	127
Year 9	2003	10,220	1,421	124
Year 10	2004	10,315	1,477	128
Year 11	0	-	-	
Year 12	0	-	-	
Year 13	0	-	-	
Year 14	0	-	-	
Year 15	0	-	-	
10-15 Year Average Baseline GPCD				**128**
5 Year Baseline GPCD				
Baseline Year *Fm SB X7-7 Table 3*		Service Area Population *Fm SB X7-7 Table 3*	Gross Water Use *Fm SB X7-7 Table 4*	Daily Per Capita Water Use
Year 1	2003	10,220	1,421	124
Year 2	2004	10,315	1,477	128
Year 3	2005	10,374	1,361	117
Year 4	2006	10,354	1,371	118
Year 5	2007	10,448	1,446	124
5 Year Average Baseline GPCD				**122**
2015 Compliance Year GPCD				
2015		10,224	1,090	**95**
NOTES:				

SB X7-7 Table 6: Gallons per Capita per Day *Summary From Table SB X7-7 Table 5*	
10-15 Year Baseline GPCD	128
5 Year Baseline GPCD	122
2015 Compliance Year GPCD	95
NOTES:	

SB X7-7 Table 7: 2020 Target Method *Select Only One*		
Target Method		Supporting Documentation
☐	Method 1	SB X7-7 Table 7A
☐	Method 2	SB X7-7 Tables 7B, 7C, and 7D *Contact DWR for these tables*
☑	Method 3	SB X7-7 Table 7-E
☐	Method 4	Method 4 Calculator
NOTES:		

SB X7-7 Table 7-E: Target Method 3				
Agency May Select More Than One as Applicable	Percentage of Service Area in This Hydrological Region	Hydrologic Region	"2020 Plan" Regional Targets	Method 3 Regional Targets (95%)
☐		North Coast	137	130
☐		North Lahontan	173	164
☐		Sacramento River	176	167
☐		San Francisco Bay	131	124
☐		San Joaquin River	174	165
☑	100%	Central Coast	123	117
☐		Tulare Lake	188	179
☐		South Lahontan	170	162
☐		South Coast	149	142
☐		Colorado River	211	200
Target *(If more than one region is selected, this value is calculated.)*				**117**
NOTES:				

SB X7-7 Table 7-F: Confirm Minimum Reduction for 2020 Target			
5 Year Baseline GPCD *From SB X7-7 Table 5*	Maximum 2020 Target[1]	Calculated 2020 Target[2]	**Confirmed 2020 Target**
122	116	117	**116**

[1] Maximum 2020 Target is 95% of the 5 Year Baseline GPCD except for suppliers at or below 100 GPCD.

[2] 2020 Target is calculated based on the selected Target Method, see SB X7-7 Table 7 and corresponding tables for agency's calculated target.

NOTES:

SB X7-7 Table 8: 2015 Interim Target GPCD		
Confirmed 2020 Target *Fm SB X7-7 Table 7-F*	10-15 year Baseline GPCD *Fm SB X7-7 Table 5*	**2015 Interim Target GPCD**
116	128	**122**
NOTES:		

SB X7-7 Table 0: Units of Measure Used in 2020 UWMP* *(select one from the drop down list)*
Acre Feet
**The unit of measure must be consistent throughout the UWMP, as reported in Submittal Table 2-3.*
NOTES:

SB X7-7 Table 2: Method for 2020 Population Estimate	
Method Used to Determine 2020 Population (may check more than one)	
☑	**1. Department of Finance** (DOF) or **American Community Survey** (ACS)
☐	**2. Persons-per-Connection Method**
☐	**3. DWR Population Tool**
☐	**4. Other** DWR recommends pre-review
NOTES: 2020 United States Census Bureau Data	

SB X7-7 Table 3: 2020 Service Area Population	
2020 Compliance Year Population	
2020	10,757
NOTES:	

SB X7-7 Table 4: 2020 Gross Water Use							
Compliance Year 2020	**2020 Volume Into Distribution System** *This column will remain blank until SB X7-7 Table 4-A is completed.*	**2020 Deductions**					**2020 Gross Water Use**
		Exported Water *	**Change in Dist. System Storage*** (+/-)	**Indirect Recycled Water** *This column will remain blank until SB X7-7 Table 4-B is completed.*	**Water Delivered for Agricultural Use***	**Process Water** *This column will remain blank until SB X7-7 Table 4-D is completed.*	
	1,090			-		-	**1,090**

*** Units of measure (AF, MG , or CCF)** must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.

NOTES:

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s), Meter Error Adjustment

Complete one table for each source.

Name of Source	Morro Basin
This water source is *(check one)* **:**	
☑	The supplier's own water source
☐	A purchased or imported source

Compliance Year 2020	Volume Entering Distribution System [1]	Meter Error Adjustment [2] *Optional (+/-)*	Corrected Volume Entering Distribution System
	61.19	-	61

[1] ***Units of measure (AF, MG , or CCF)*** *must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.* [2] ***Meter Error Adjustment*** *- See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES

SB X7-7 Table 4-A: 2020 Volume Entering the Distribution System(s) Meter Error Adjustment

Complete one table for each source.

Name of Source	SWP Water
This water source is *(check one)* **:**	
☐	The supplier's own water source
☑	A purchased or imported source

Compliance Year 2020	Volume Entering Distribution System [1]	Meter Error Adjustment [2] *Optional (+/-)*	Corrected Volume Entering Distribution System
	1,028.88		1,029

[1] ***Units of measure (AF, MG , or CCF)*** *must remain consistent throughout the UWMP, as reported in SB X7-7 Table 0 and Submittal Table 2-3.* [2] ***Meter Error Adjustment*** *- See guidance in Methodology 1, Step 3 of Methodologies Document*

NOTES:

SB X7-7 Table 5: 2020 Gallons Per Capita Per Day (GPCD)		
2020 Gross Water *Fm SB X7-7 Table 4*	**2020 Population** *Fm SB X7-7 Table 3*	**2020 GPCD**
1,090	10,757	**90**
NOTES:		

SB X7-7 Table 9: 2020 Compliance							
Actual 2020 GPCD[1]	Optional Adjustments to 2020 GPCD Enter "0" if Adjustment Not Used			TOTAL Adjustments[1]	Adjusted 2020 GPCD [1] *(Adjusted if applicable)*	2020 Confirmed Target GPCD [1, 2]	**Did Supplier Achieve Targeted Reduction for 2020?**
	Extraordinary Events[1]	Weather Normalization[1]	Economic Adjustment[1]				
90	-	-	-	-	90	116	**YES**

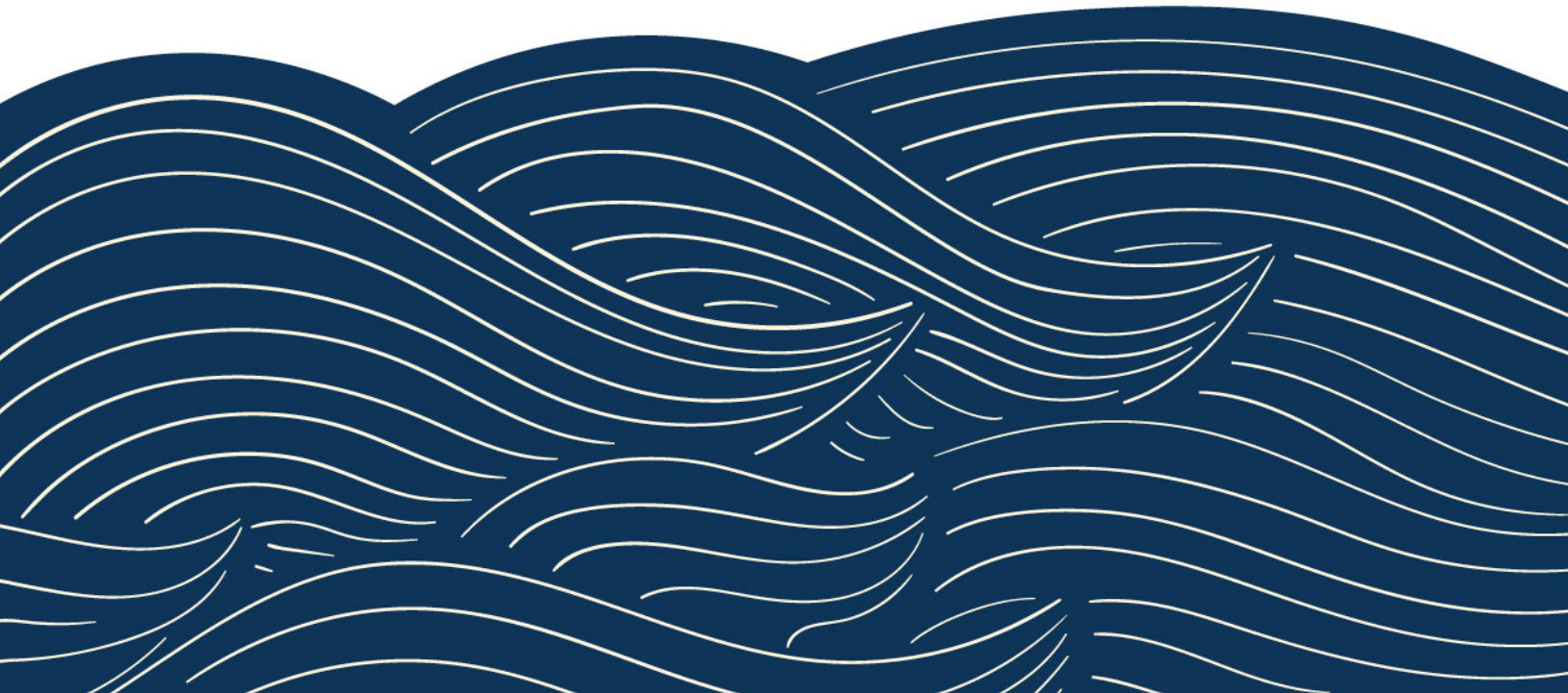
[1] *All values are reported in GPCD*

[2] ***2020 Confirmed Target GPCD*** *is taken from the Supplier's SB X7-7 Verification Form Table SB X7-7, 7-F.*

NOTES:

F

Demonstration of Reduced Delta Reliance



Quantifying Regional Self-Reliance and Reduced Reliance on Water Supplies from the Delta Watershed

1. Background

Under the Sacramento-San Joaquin Delta Reform Act of 2009, state and local public agencies proposing a covered action in the Delta, prior to initiating the implementation of that action, must prepare a written certification of consistency with detailed findings as to whether the covered action is consistent with applicable Delta Plan policies and submit that certification to the Delta Stewardship Council. Anyone may appeal a certification of consistency, and if the Delta Stewardship Council grants the appeal, the covered action may not be implemented until the agency proposing the covered action submits a revised certification of consistency, and either no appeal is filed, or the Delta Stewardship Council denies the subsequent appeal.

An urban water supplier that anticipates participating in or receiving water from a proposed 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 Delta should provide information in their 2015 and 2020 Urban Water Management Plans (UWMPs) that can then be used in the covered action process to demonstrate consistency with Delta Plan Policy WR P1, Reduce Reliance on the Delta Through Improved Regional Water Self-Reliance (WR P1).

WR P1 details what is needed for a covered action to demonstrate consistency with reduced reliance on the Delta and improved regional self-reliance. WR P1 subsection (a) states that:

> *(a) Water shall not be exported from, transferred through, or used in the Delta if all the following apply:*
>
> > *(1) One or more water suppliers that would receive water as a result of the export, transfer, or use have failed to adequately contribute to reduced reliance on the Delta and improved regional self-reliance consistent with all of the requirements listed in paragraph (1) of subsection (c);*
> >
> > *(2) That failure has significantly caused the need for the export, transfer, or use; and*
> >
> > *(3) The export, transfer, or use would have a significant adverse environmental impact in the Delta.*

WR P1 subsection (c)(1) further defines what adequately contributing to reduced reliance on the Delta means in terms of (a)(1) above.

> *(c)(1) Water suppliers that have done all the following are contributing to reduced reliance on the Delta and improved regional self-reliance and are therefore consistent with this policy:*
>
> > *(A) Completed a current Urban or Agricultural Water Management Plan (Plan) which has been reviewed by the California Department of Water Resources for compliance with the applicable requirements of Water Code Division 6, Parts 2.55, 2.6, and 2.8;*
> >
> > *(B) Identified, evaluated, and commenced implementation, consistent with the implementation schedule set forth in the Plan, of all programs and projects included in the Plan that are locally cost effective and technically feasible which reduce reliance on the Delta; and*
> >
> > *(C) Included in the Plan, commencing in 2015, the expected outcome for measurable reduction in Delta reliance and improvement in regional self-reliance. The expected outcome for measurable reduction in Delta reliance and improvement in regional self-*

reliance shall be reported in the Plan as the reduction in the amount of water used, or in the percentage of water used, from the Delta watershed. For the purposes of reporting, water efficiency is considered a new source of water supply, consistent with Water Code section 1011(a).

The analysis and documentation provided below include all 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. Methodology

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for improved regional self-reliance and measurable reduction in Delta reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta. The expected outcomes for the City of Morro Bay's (City's) regional self-reliance and reduced Delta reliance were developed using the approach and guidance described in Appendix C of DWR's Urban Water Management Plan Guidebook 2020 issued in March 2021 (Guidebook Appendix C).

The methodology used to determine the City's improved regional self-reliance is consistent with the approach detailed in DWR's UWMP Guidebook Appendix C, including the use of narrative justifications for the accounting of supplies and the documentation of specific data sources. Some of the key assumptions underlying the City's demonstration of reduced reliance include:

- All data were obtained from the current 2020 UWMP or previously adopted UWMPs and represent average or normal water year conditions.
- All analyses were conducted at the service area level, and all data reflect the total contributions of the City and its customers.
- Future projects that are covered actions requiring a certification of consistency with the Delta Plan were excluded from this analysis.

To calculate the expected outcomes for improved regional self-reliance and reduced Delta reliance, the outcomes need to be compared to a baseline. This analysis uses a normal water year representation of 2010 as the baseline, which is consistent with the approach described in the Guidebook Appendix C. Data for the 2010 baseline were taken from the City's 2005 UWMP, as UWMPs generally do not provide normal water year data for the year that they are adopted (i.e., 2005 UWMP forecasts begin in 2010, 2010 UWMP forecasts begin in 2015, and so on).

Consistent with the 2010 baseline data approach, the expected outcomes for improved regional self-reliance and reduced Delta reliance for 2015 and 2020 were taken from the City's 2010 and 2015 UWMPs, respectively. Expected outcomes for 2025-2045 are from the current 2020 UWMP. Documentation of the specific data sources and assumptions are included in the discussions below.

3. Demonstration of Regional Self-Reliance

Service Area Demands without Water Use Efficiency

In alignment with the Guidebook Appendix C, this analysis uses normal water year demands, rather than normal water year supplies to calculate expected outcomes in terms of the percentage of water used. Normal water year demands serve as a proxy for the amount of supplies that would be used in a normal water year, which helps alleviate issues associated with how supply capability is presented to fulfill the requirements of the UWMP Act versus how supplies might be accounted for to demonstrate consistency with WR P1.

Because WR P1 considers water use efficiency savings a source of water supply, water suppliers can calculate their embedded water use efficiency savings based on changes in forecasted per capita water

use compared to the baseline. As explained in the Guidebook Appendix C, water use efficiency savings must be added back to the normal year demands to represent demands without water use efficiency savings accounted for; otherwise, the effect of water use efficiency savings on regional self-reliance would be overestimated. Table 1 shows the results of this adjustment for the City. Supporting narratives and documentation for all the data shown in Table 1 are provided below.

Service Area Demands with Water Use Efficiency

The service area water demands shown in Table 1 represent the total municipal and industrial (M&I) water demands for the City's retail service area.

The M&I demand data shown in Table 1 were collected from the following sources:

- Baseline (2010): City's 2005 UWMP, Table 4-3
- 2015: City's 2010 UWMP, Table 3-7
- 2020: City's 2015 UWMP, Table 4-2
- 2025-2045: City's 2020 UWMP, Table 4-4

Service Area Population

The population data shown in Table 1 were collected from the following sources:

- Baseline (2010): City's 2010 UWMP, Table 2-1
- 2015: City's 2015 UWMP, Table 3-1
- 2020-2045: City's 2020 UWMP, Table 3-2

Estimated Water Use Efficiency Since Baseline

The "Estimated Water Use Efficiency Since Baseline" was calculated using "Potable Service Area Demands with Water Use Efficiency" divided by "Service Area Population" and then comparing with 2010 Per Capita Water Use.

Service Area Water Demands without Water Use Efficiency

In Table 2, the "Service Area Demands with Water Use Efficiency" was added to the "Estimated Water Use Efficiency Since Baseline" to obtain the "Service Area Water Demands without Water Use Efficiency Accounted For".

Supplies Contributing to Regional Self-Reliance

For a covered action to demonstrate consistency with the Delta Plan, WR P1 subsection (c)(1)(C) states that water suppliers must report the expected outcomes for measurable improvement in regional self-reliance. Table 3 shows expected outcomes for supplies contributing to regional self-reliance both in amount and as a percentage. The numbers shown in Table 3 represent efforts to improve regional self-reliance for the City's entire service area. Supporting narratives and documentation for all the data provided in Table 3 are described below.

Water Use Efficiency

The water use efficiency information shown in Table 3 is taken directly from Table 1.

Advanced Water Technologies

In the past, the City has used desalinated water as a supply. However, the City's desalination plant has been used minimally over the last decade. The desalination plant provides a source of backup and emergency water supply in case of future State Water Project (SWP) supply reductions or service outages. Currently, the facility is in a state of needed repair and is not in use and is therefore not included as a future supply source. The City's advanced water technologies shown in Table 3 refer to desalinated water and were from the following sources:

- Baseline (2010): City's 2005 UWMP, assumed consistent with supply identified for the next three years (2006-2009) in Table ES-10.
- 2015: City's 2010 UWMP, Table 4-1
- 2020: City's 2015 UWMP, Table 6-9
- 2025-2045: Not applicable at this time.

Local and Regional Water Supply and Storage Projects

Other programs and projects that contribute to regional self-reliance shown in Table 3 include the City's local groundwater supply. These values come from the following sources:

- Baseline (2010): City's 2005 UWMP, Table 5-3
- 2015: City's 2010 UWMP, Table 4-1
- 2020: City's 2015 UWMP, Table 6-9
- 2025-2045: City's 2020 UWMP, Table 6-9

4. Summary of Expected Outcomes for Reduced Reliance on the Delta

As stated in WR P1(c)(1)(C), the policy requires that, commencing in 2015, UWMPs include expected outcomes for measurable reduction in Delta reliance and improved regional self- reliance. WR P1 further states that those outcomes shall be reported in the UWMP as the reduction in the amount of water used, or in the percentage of water used, from the Delta.

The expected outcomes for the City's reduced Delta reliance and regional self-reliance were developed using the approach and guidance described in Guidebook Appendix C issued in March 2021.

Regional Self-Reliance

The results shown in Table 3 demonstrate that the City's service area is improving its regional self-reliance. The following provides a summary of the near-term (2025) and long-term (2045) expected outcomes for City's Delta reliance on supplies from the Delta watershed:

- Near-term (2025) – Normal water year regional self-reliance is expected to increase by about 400 AFY from the 2010 baseline (Table 3).
- Long-term (2045) – Normal water year regional self-reliance is expected to increase by approximately 430 AFY from the 2010 baseline (Table 3).

5. UWMP Implementation

In addition to the analysis and documentation described above, WR P1 subsection (c)(1)(B) requires that all programs and projects included in the UWMP that are locally cost-effective and technically feasible, which reduce reliance on the Delta, are identified, evaluated, and implemented consistent with the implementation schedule. WR P1 (c)(1)(B) states that:

> *(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[.]*

In accordance with Water Code Section 10631(f), water suppliers must already include in their UWMP a detailed description of expected future projects and programs that they may implement to increase the amount of water supply available to them in normal and single-dry water years and for a period of drought lasting five consecutive years. The UWMP description must also identify specific projects, including a description of the increase in water supply that is expected to be available from each project, and include an estimate regarding the implementation timeline for each project or program.

Chapter 6 of the City's 2020 UWMP summarizes the implementation plan and water portfolio to meet the region's water needs.

Table 1. Optional Calculation of Water Use Efficiency

Service Area Water Use Efficiency Demands (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	1,600	1,334	1,298	1,333	1,366	1,400	1,445	1,445
Non-Potable Water Demands								
Potable Service Area Demands with Water Use Efficiency Accounted For	1,600	1,334	1,298	1,333	1,366	1,400	1,445	1,445

Total Service Area Population	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Population	10,608	10,224	10,757	11,213	11,525	11,837	12,149	12,169

Water Use Efficiency Since Baseline (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Per Capita Water Use (GPCD)	135	116	108	106	106	106	106	106
Change in Per Capita Water Use from Baseline (GPCD)		(18)	(27)	(29)	(29)	(29)	(28)	(29)
Estimated Water Use Efficiency Since Baseline		208	324	358	372	385	387	390

Table 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 (Optional)
Service Area Water Demands with Water Use Efficiency Accounted For	1,600	1,334	1,298	1,333	1,366	1,400	1,445	1,445
Reported Water Use Efficiency or Estimated Water Use Efficiency Since Baseline	-	208	324	358	372	385	387	390
Service Area Water Demands without Water Use Efficiency Accounted For	1,600	1,542	1,622	1,691	1,738	1,785	1,832	1,835

Table 3. Calculation of Supplies Contributing to Regional Self-Reliance

Water Supplies Contributing to Regional Self-Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Use Efficiency	-	208	324	358	372	385	387	390
Water Recycling			-					
Stormwater Capture and Use								
Advanced Water Technologies	106	645	645					
Conjunctive Use Projects								
Local and Regional Water Supply and Storage Projects	262	1,724	1,724	407	407	407	407	407
Other Programs and Projects the Contribute to Regional Self-Reliance								
Water Supplies Contributing to Regional Self-Reliance	368	2,577	2,693	765	779	792	794	797

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	1,600	1,542	1,622	1,691	1,738	1,785	1,832	1,835

Change in Regional Self Reliance (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies Contributing to Regional Self-Reliance	368	2,577	2,693	765	779	792	794	797
Change in Water Supplies Contributing to Regional Self-Reliance		2,209	2,325	397	411	424	426	429

Percent Change in Regional Self Reliance (As Percent of Demand w/out WUE)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Percent of Water Supplies Contributing to Regional Self-Reliance	23.0%	167.1%	166.0%	45.2%	44.8%	44.4%	43.4%	43.4%
Change in Percent of Water Supplies Contributing to Regional Self-Reliance		144.1%	143.0%	22.2%	21.8%	21.4%	20.4%	20.4%

Table 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 (Optional)
CVP/SWP Contract Supplies	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
Delta/Delta Tributary Diversions								
Transfers and Exchanges								
Other Water Supplies from the Delta Watershed								
Total Water Supplies from the Delta Watershed	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313

Service Area Water Demands without Water Use Efficiency (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Service Area Water Demands without Water Use Efficiency Accounted For	1,600	1,542	1,622	1,691	1,738	1,785	1,832	1,835

Change in Supplies from the Delta Watershed (Acre-Feet)	Baseline (2010)	2015	2020	2025	2030	2035	2040	2045 (Optional)
Water Supplies from the Delta Watershed	1,313	1,313	1,313	1,313	1,313	1,313	1,313	1,313
Change in Water Supplies from the Delta Watershed		-	-	-	-	-	-	-

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 (Optional)
Percent of Water Supplies from the Delta Watershed	82.1%	85.1%	80.9%	77.6%	75.5%	73.5%	71.7%	71.5%
Change in Percent of Water Supplies from the Delta Watershed		3.1%	-1.1%	-4.4%	-6.5%	-8.5%	-10.4%	-10.5%

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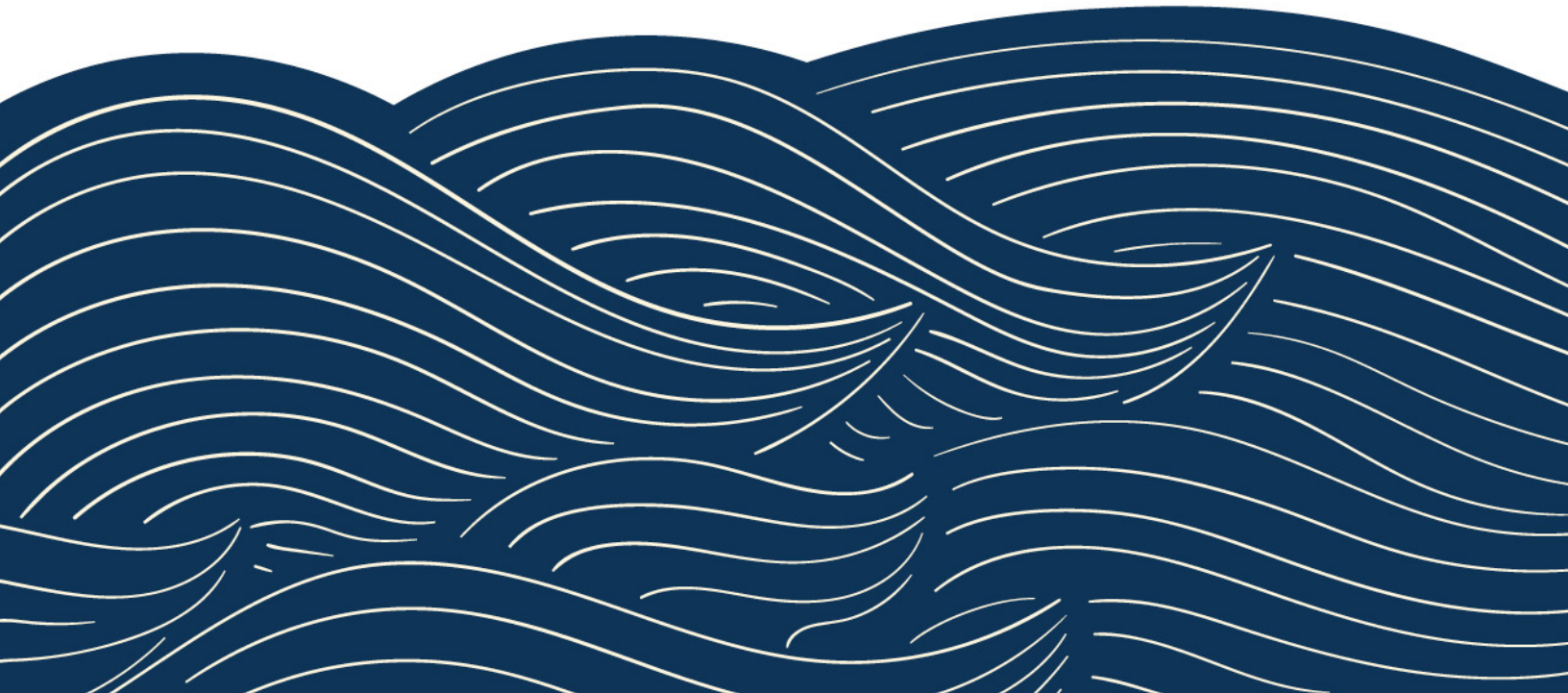
Water Shortage Contingency Plan



Water Shortage Contingency Plan

Final

OCTOBER 2021

CITY OF MORRO BAY

WSC

CITY OF MORRO BAY

Water Shortage Contingency Plan

OCTOBER 2021

Prepared by Water Systems Consulting, Inc.

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1 Water Shortage Contingency Plan

This Water Shortage Contingency Plan (WSCP) is a detailed plan for how the City of Morro Bay (City) intends to predict and respond to foreseeable and unforeseeable water shortages. A water shortage occurs when the water supply is reduced to a level that cannot support typical demand at any given time or reduction in demand is otherwise needed.

This WSCP is used to provide guidance to the City, staff, and the public by identifying anticipated shortages and response actions to allow for efficient management of any water shortage with predictability and accountability. The WSCP is a detailed proposal for how the City intends to act in the case of an actual water shortage condition. This WSCP is not intended to provide absolute direction but rather to provide options to manage water shortages. Official water shortage declarations by the City may include any combination of components described in this WSCP.

Water shortages can be triggered by a hydrologic limitation in supply (i.e., a prolonged period of below normal precipitation), limitations or failure of supply and treatment infrastructure, compliance with State mandates for water use efficiency, or a combination of conditions. Hydrologic or drought limitations tend to develop and abate more slowly, whereas infrastructure failure tends to happen quickly and relatively unpredictably. Water supplies may be interrupted or reduced significantly in several ways, such as during a drought that limits supplies, an earthquake that damages water delivery or storage facilities, a regional power outage, or a toxic spill that affects water quality.

IN THIS SECTION

This WSCP describes the following:

Water Supply Reliability Analysis: Summarizes the City's water supply analysis and reliability and identifies the 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.

Six Standard Shortage Levels: 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 level to reduce gaps between supply and demand as well as minimize social and economic impacts to the community.

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

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

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

Financial Consequences of WSCP Implementation: Describes the anticipated financial impact of implementing water shortage levels 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 shortage response actions should be adjusted.

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

Special Water Features Distinctions: Defines considerations and definitions for water use for decorative features versus pools and spas.

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

This WSCP was prepared in conjunction with the City's 2020 Urban Water Management Plan (UWMP) (Water Systems Consulting Inc., August 2021) and is a standalone document that can be modified as needed. This document is compliant with the California Water Code (CWC) Section 10632 and incorporated guidance from the State of California Department of Water Resources (DWR) UWMP Guidebook 2020 (Department of Water Resources, 2020) and the American Water Works Association (AWWA) Manual of Water Supply Practices (M60) Drought Preparedness and Response (American Water Works Association (AWWA), 2019).

1.1 Water Supply Reliability Analysis

This section is consistent with CWC Section 10632(a)(1) and describes the key findings of the water supply reliability analysis conducted pursuant to CWC Section 10635, which is presented in Chapter 7 of the City's 2020 UWMP. As part of the 2020 UWMP, water suppliers must perform long-term (2025-2045) water service reliability assessment to evaluate reliability under normal, single dry year, and five-year consecutive dry year periods and a short-term (2021-2025) Drought Risk Assessment (DRA) to evaluate reliability under a five-year consecutive dry year period. Water supply reliability reflects the City's ability to meet the water needs of its customers with water supplies under varying conditions. The analysis considers plausible hydrological and regulatory variability, infrastructure capacity, climate conditions, and other factors that affect the City's water supply and demand. The City expects to meet demands under all water year scenarios while continuing to promote conservation.

The DRA analyzes historical data to allow the City to view patterns and more reliably determine if there could be any water shortages within a given time frame. The DRA looks at historical consumption data by customer class, populated from billing records, and historical supply data by source from production reports. Next, future demand and supply estimates for the planning period are analyzed to determine if there are any gaps between supply and demand. As mentioned above, the City does not anticipate a supply shortage. The City is committed to promoting conservation and use of recycled water to increase its supply portfolio, resiliency, and subsequent reliability as described in Chapter 7 of the 2020 UWMP.

1.2 Annual Water Supply and Demand Assessment

As established by CWC Section 10632.1, urban water suppliers must conduct an Annual Water Supply and Demand Assessment (Annual Assessment) and submit an Annual Water Shortage Assessment Report to DWR beginning by July 1, 2022, and every year after. The Annual Assessment is an evaluation of the short-term outlook for supplies and demands to determine whether the potential for a supply shortage exists and whether there is a need to trigger a WSCP shortage level and response actions to maintain supply reliability. The annual report should report the anticipated shortage level, triggered shortage response actions, compliance and enforcement actions, and communication actions that will be implemented to mitigate the shortage identified in the Annual Assessment.

1.2.1 Key Data Inputs and Evaluation Criteria

Declarations of water supply conditions will occur annually, or more frequently if conditions warrant it, after evaluation by City staff and the approval by City Council at a public meeting. Such resolution will be based on the current shortage situation, the amount of imported water available from the State Water Project (SWP), and other inputs shown below. The respective water shortage condition dictates the degree at which shortage response actions are implemented at any time in the City. Some of the potential reasons to change stages are listed as follows:

- Advancement to subsequent stage
    - Emergency condition, such as failure of pumping equipment, etc., that requires a percentage of water consumption reduction greater than that of the current stage.
    - Regulatory action that requires a percentage reduction or compliance with a water consumption standard.

- Failure to maintain target water consumption reduction goal of a given stage.

- Withdrawal to previous stage
  - Emergency condition has been decreased in severity or resolved, so that the previous target goal may be utilized.
  - Regulatory action or standard has been resolved or modified.
  - Water consumption reductions have been above that necessary to meet target goals of the current stage.

The City is responsible for supplying water for the health and safety needs of the community. If it appears that the City may be unable to supply the demands and requirements of the water customers, the City Council may declare a water supply shortage condition.

Key data inputs and their sources for the Annual Assessments are summarized in **Table 8-1** and described in detail in **Section 1.2.2**. Evaluation criteria that can be used to determine and declare severity of supply shortages may include any, or combinations, of the following:

- Historic rainfall: reflects changes to supply due to reduced imported SWP availability or changes to water usage patterns influenced by weather
- Existing infrastructure capabilities and plausible constraints: reflects limited production and distribution capacity due to a variety of factors potentially including, but not limited to, man-made or natural catastrophic events
- Customer demands: reflects current year and one projected single dry year conditions for comparison to available supplies
- SWP Table A Allocation: reflects how much SWP water will be available to the City. Since SWP is currently the main supply source for the City, the City may consider implementing a shortage based on available SWP water. **Figure 8-1** shows some scenarios in which the City may want to consider implementing a shortage based on Table A Allocation percentages in addition to consideration of available stored SWP water.
- Stored SWP: Amount of stored SWP available to the City in the San Luis Reservoir reflects an additional supply that can be used to meet demands.
- State mandates: reflects State orders and mandatory compliance with water use efficiency standards
- Other locally applicable evaluation criteria as necessary

A shortage emergency may be declared when it is demonstrated that conditions threaten the ability to provide water for public health, safety, and welfare of the community. Furthermore, compliance with State mandates for water use efficiency can be declared during drought or in preparation for future droughts, such as in response to the Governor's drought declarations in the 2012-2016 drought with a subsequent Executive Order B-37-16 and related legislation for Making Conservation a California Way of Life.

Short-term and long-term supply shortages may be caused by constrained production capacity or natural or man-made catastrophic emergencies and include, but are not limited to, the following events: power outages, winter storms, wildfires, earthquakes, structural failures, contamination, and bomb threats. These types of emergencies may limit the City's immediate ability to provide adequate water

service to meet the requirements for human consumption, sanitation, and fire protection. Impacts of such emergencies vary in duration; thus, consumption reduction measures and prohibitions may differ for short-term and long-term shortages.

Table 1-1. Key Data Inputs for the Annual Assessment.

KEY DATA INPUT	SOURCE
Rainfall	Monthly rainfall data. Rainfall sources for the City include weather stations at the Fire Station and WWTP.
SWP Allocation	SWP allocation and storage data, input from the City's staff.
Stored SWP	SLOFCWCD, Stored SWP available to the City from the San Luis Reservoir.
Infrastructure capabilities and plausible constraints	Production data, input from the City's Water Division staff.
Customer demands	Customer billing data, Water equivalency table, 2020 UWMP projections, input from the City's Water Division staff.
State mandates	Executive Orders from the Governor, State Water Resources Control Board orders and policies, input from the City's Water Division staff.

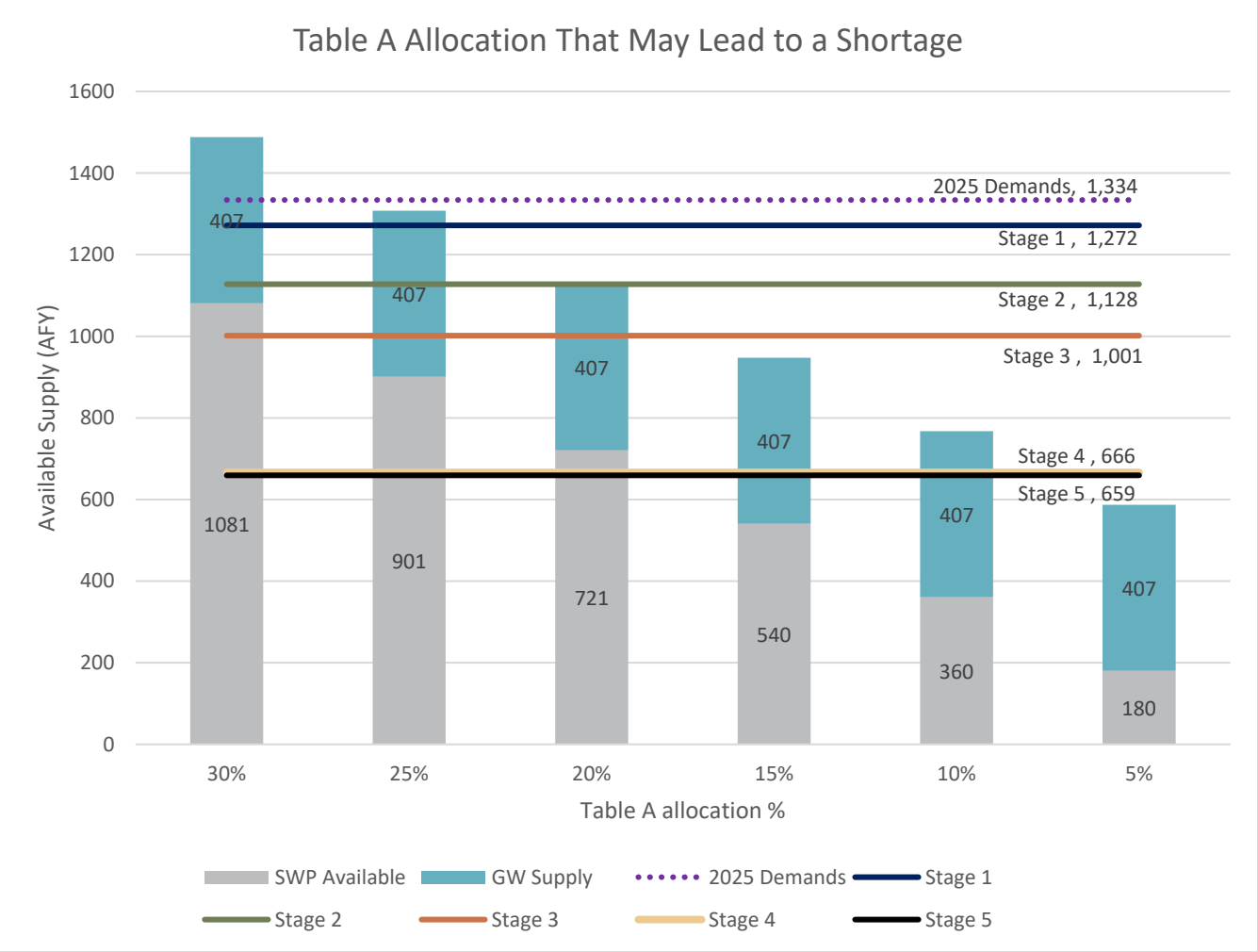


Figure 1-1: Table A Allocations that May Lead to a Shortage

1.2.2 Annual Assessment Procedures

City staff will perform the Annual Assessment between May-June, or on a more frequent basis if necessary. Steps to conduct the Annual Assessment are as follows:

1. Staff gather the key inputs, compile historical data, and analyze potential supply and demand gaps.
2. Staff provide insight on demand trends, water supply conditions, and production capacity.
3. The Public Works Director is charged with submitting an annual water report to the City Council, Public Works Advisory Board and Planning Commission; reviewing and approving the water equivalency units required by individual projects; monitoring the water equivalency program during each year; periodically updating the basis for a water equivalency unit and the water equivalency table and adjusting them based on significant changes of water consumption by land use type; and developing operating procedures for the administration of the water equivalency program and allocating water equivalency units to projects established for the year, in accordance with the water equivalency program.
4. The Public Works Director, based upon information from the annual water report will make recommendations to the City Manager about the advancement, withdrawal, or termination of water shortage levels and will provide reports on water supply and demand status as required. At a minimum, an “Annual Water Report” will be made available to the Director and City Council on an annual basis.
5. Based on water supply and water demand information, the City Council may order by resolution that the appropriate water shortage stage be implemented or terminated in accordance with the applicable provisions of this WSCP and the relevant provisions of the Morro Bay Municipal Code, the Government Code, and the CWC. Findings and recommendations are presented to the City Council.
6. The City Council will declare the level of shortage required at the implementation or termination of each level and the declaration shall remain in effect until the City Council declares otherwise.
7. When a resolution of the City Council has been issued to change the water stage, the public will be notified through publication of the resolution in the local newspaper, on the City’s website, and in the billing statement.
8. The City will develop and/or implement appropriate communication protocols and applicable response actions.

The Annual Assessment starts in 2022 with the first Annual Assessment Report due to DWR by July 1, 2022.

1.3 Six Standard Water Shortage Levels

This section is consistent with CWC Section 10632(a)(2) and describes the City’s water shortage levels. New to the CWC, water suppliers must now adopt water shortage levels that equivalently address six standard water shortage levels. Shortage levels indicate the gap between supply and demand compared to normal year conditions. DWR standardized six shortage levels to provide a consistent regional and statewide approach to measure water supply shortage conditions. The six shortage levels correspond to 10-, 20-, 30-, 40-, 50-percent, and greater than 50 percent shortage compared to the normal reliability conditions. However, a water supplier may use its own shortage levels if a crosswalk is included relating its existing shortage levels to the six standard levels. The crosswalk between the City’s five levels and the standard water shortage levels is shown in **Figure 1-2**.

Table 1-2 shows the City's five stages and their representative shortages. As shown in **Table 1-2**, the water shortage stages include consideration of water shortages up to a Stage 5 Shortage, an Emergency Water Supply Shortage, which includes a greater than 50% shortage stage with a corresponding water demand reduction objective of greater than 50 percent. Each stage includes a water reduction objective, supply conditions and percent of normal water supply, which may vary based on the nature of water supply emergency. The implementation of the plan is dependent on the cause, severity, and anticipated duration of the water supply shortage. A combination of water conservation measures, known as shortage response actions, would be used to reduce water usage in the event of water shortages.

Table 1-2. DWR 8-1 Water Shortage Contingency Plan Levels

SHORTAGE LEVEL	PERCENT SHORTAGE RANGE[1]	SHORTAGE RESPONSE ACTIONS
1	Up to 5%	Normal Water Supply Conditions
2	5 to 15%	Moderately Restricted Water Supply Conditions: Required savings may be met through a combination of quantifiable and unquantifiable actions. The City will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that some of the required savings will be met through quantifiable shortage response actions and the remaining savings will be met through other actions, including communication and outreach efforts. For a list of all specific shortage response actions and their potential savings, please refer to Table 1-3.
3	15 to 25%	Severely Restricted Water Supply Conditions: Required savings may be met through a combination of quantifiable and unquantifiable actions. The City will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that some of the required savings will be met through quantifiable shortage response actions and the remaining savings will be met through other actions, including communication and outreach efforts. For a list of all specific shortage response actions and their potential savings, please refer to Table 1-3.
4	25 to 50%	Critical Water Supply Conditions: Required savings may be met through a combination of quantifiable and unquantifiable actions. The City will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that some of the required savings will be met through quantifiable shortage response actions and the remaining savings will be met through other actions, including communication and outreach efforts. For a list of all specific shortage response actions and their potential savings, please refer to Table 1-3.
5	50% or greater	Emergency Water Supply Conditions: Required savings may be met through a combination of quantifiable and unquantifiable actions. The City will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that some of the required savings will be met through quantifiable shortage response actions and the remaining savings will be met through other actions, including communication and outreach efforts. For a list of all specific shortage response actions and their potential savings, please refer to Table 1-3.

[1] One stage in the Water Shortage Contingency Plan must address a water shortage of greater than 50%.

NOTE: Percent supply reduction is based upon Morro Bay's 2015 UWMP

CITY OF MORRO BAY SHORTAGE LEVEL	SUPPLY CONDITION/SHORTAGE
1	Normal Water Supply Conditions (<5%)
2	Moderately Restricted Water Supply Conditions (5-15%)
3	Severely Restricted Water Supply Conditions (15-25%)
4	Critical Water Supply Conditions (25-50%)
5	Emergency Water Supply Conditions (>50%)

STANDARD WSCP LEVEL	PERCENT SHORTAGE LEVEL
1	<10%
2	10-20%
3	20-30%
4	30-40%
5	40-50%
6	>50%

Figure 1-2: Water Shortage Levels Crosswalk

1.4 Shortage Response Actions

This section is in accordance with CWC Section 10632(a)(4) and 10632.5(a) and describes the response actions that may be implemented or considered for each level with emphasis to minimize social and economic impacts to the community. The City expects to mitigate supply shortages through a variety of response actions including demand reduction actions, supply augmentation, operational changes, and mandatory prohibitions.

This WSCP identifies various actions to be considered by the City during water shortage conditions. In the event of a water shortage, the City will evaluate the cause of the shortage to help inform which response actions should be implemented. Depending on the nature of the water shortage, the City can elect to implement a combination of response actions to mitigate the shortage and reduce gaps between supply and demand. It should be noted that all actions listed for Level 1 apply to Level 2, 3, 4, and 5. Likewise, Level 2 actions apply to Levels 3, 4, and 5, Level 3 actions apply to Level 4 and 5, and Level 4 actions apply to Level 5. If necessary, the City may enact additional actions that are not listed in this WSCP. The following section discusses the potential response actions for each of the City's five water supply shortage levels.

1.4.1 Demand Reduction

In order to reduce water demands during water shortage periods, the City Council can declare an emergency by resolution and thereby authorize the implementation of the WSCP as outlined in the municipal code. The resolution declares which of the five stages is enacted. The actions to be undertaken during each stage include, but are not limited to, the following:

Stage 1 Normal Water Supply Conditions - The demand reduction actions for this stage include:

- Outdoor water use for washing vehicles, boats, paved surfaces, buildings or other similar uses shall be attended and have hand-controlled water devices, typically including spring-loaded shutoff nozzles.
- Outdoor irrigation resulting in excessive gutter runoff is prohibited.
- Marinas and waterfront installations: all hoses shall have spring-loaded shutoff nozzles or similar controlling devices.
- Restaurants shall serve drinking water only in response to a specific request by the customer.

- Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection A2 of the City's 13.04.345 Mandatory Water Conservation Requirements; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive without excessive gutter runoff. All other conservation measures remain applicable during the temporary exemption.

Stage 2 Moderately Restricted Water Supply Conditions - Stage 2 includes actions undertaken in Stage 1. The demand reduction actions for this stage include:

- No water shall be used for cleaning driveways, patios parking lots, sidewalks, streets, or other such uses except where necessary to protect the public health or safety.
- Outdoor Irrigation.
    - Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.
    - All consumers are directed to use no more water than necessary to maintain landscaping.
- Restaurants shall serve drinking water only in response to a specific request by a customer.
- Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection B1 of the City's 13.04.345 Mandatory Water Conservation Requirements; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive without excessive gutter runoff. All other conservation measures remain applicable during the temporary exemption.

Stage 3 Severely Restricted Water Supply Conditions - Stage 3 includes all steps taken in prior stages regarding allotments and mandatory conservation rules. The demand reduction actions for this stage include:

- Outdoor Water Use (Except Irrigation).
    - Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- Outdoor Irrigation.
    - Irrigation of private and public landscaping, turf areas, and gardens is permitted at even-numbered addresses only on Wednesdays and Sundays, and at odd-numbered addresses only on Tuesdays and Saturdays. All consumers are directed to use no more water than necessary to maintain landscaping.
    - Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection (C)(2)(b) of the City's 13.04.345 Mandatory Water Conservation Requirements; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive with twice per week watering. All other conservation measures remain applicable during the temporary exemption.
- Marinas and Waterfront Installations.
    - Use of fresh water to wash down boats, docks, or other incidental activities is prohibited.

- Emptying and refilling of swimming pools and commercial spas is prohibited except to prevent structural damage and/or to comply with public health regulations.
- Use of potable water for compaction or dust control purposes in construction activities is prohibited.
- Any dysfunctional water fixtures in public or commercial facilities shall be repaired within three days of receipt of notification by the city.
- All visitor-serving facilities in the city shall prominently display these mandatory water conservation requirements for the benefit and education of visitors to the community. Such display shall be done in a permanent vandal-resistant manner. Visitor-serving facilities shall include, but not be limited to, all motels, restaurants, campgrounds, recreational vehicle parks, mobile home parks, service stations, public restrooms, etc. The owners or managers of such facilities shall distribute to all customers a printed handout or flyer describing these mandatory water conservation requirements. Such handouts or flyers shall be provided to the owners or managers of such facilities by the city free of charge.

Stage 4 Critical Water Supply Conditions - Stage 4 includes all steps taken in prior stages regarding allotments and mandatory conservation. The demand reduction actions for this stage include:

- Outdoor Water Use (Except Irrigation).
    - Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to non-wasteful applications.
- Outdoor Irrigation.
    - Irrigation of private and public landscaping, turf areas, and gardens is permitted at even-numbered addresses only on Wednesdays and Sundays, and at odd-numbered addresses only on Tuesdays and Saturdays. All consumers are directed to use no more water than necessary to maintain landscaping.
    - Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection (C)(2)(b) of the City's 13.04.345 Mandatory Water Conservation Requirements; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive with twice per week watering. All other conservation measures remain applicable during the temporary exemption.

Stage 5 Emergency Water Supply Conditions - Stage 5 includes all steps taken in prior stages regarding allotments and mandatory conservation. The demand reduction actions for this stage include:

- The City Council may impose water-rationing requirements as it deems appropriate with Sections 13.04.330 and 13.04.340.

In the event of a water supply shortage, the City may implement voluntary and mandatory compliance measures to induce water conservation. The City's Municipal Code 13.04.345 includes prohibitions on various wasteful water uses during a declared water supply shortage (**Appendix I**). Additionally, the City may choose to utilize measures that are listed in **Table 1-4** at various shortage levels.

Although it is difficult to estimate the volume of savings for each action, the City expects to meet required reductions through a combination of response actions in conjunction with outreach and communication efforts to the extent necessary to mitigate any impacts from a water shortage. The

estimated water savings potential summarized in **Table 1-3** and **Table 1-4** represent a range from published industry references.

Table 1-3. Estimated Savings by Shortage Level

LEVEL	SUPPLY CONDITION/SHORTAGE, %	NORMAL SUPPLY, AF	REQUIRED SAVINGS[1], AF	ESTIMATED SAVINGS FROM QUANTIFIABLE ACTIONS[2], AF	ESTIMATED SAVINGS FROM UNQUANTIFIABLE ACTIONS, AF
1	<5%	1,090	55	1	54
2	5-15%	1,090	164	3	161
3	15-25%	1,090	273	348	166
4	25-50%	1,090	545	374	171
5	>50%	1,090	556	374	182

[1] Required savings may be met through a combination of quantifiable and unquantifiable actions. The City will only implement measures to the extent necessary to mitigate a water shortage, although estimates may indicate a greater savings is obtainable. It is anticipated that required savings will be met through quantifiable shortage response actions and through other unquantifiable actions, including outreach efforts.

[2] Quantifiable savings are estimated based on various published sources and are provided as a guide. The degree of implementation of actions can vary in each stage and can result in a wide range of savings. For a list of all the City's specific shortage response actions and their maximum potential savings, refer to Table 1-4.

Table 1-4. DWR 8-3 Demand Reduction Actions

SHORTAGE LEVEL	DEMAND REDUCTION ACTIONS	HOW MUCH IS THIS GOING TO REDUCE THE SHORTAGE GAP?	ADDITIONAL EXPLANATION OR REFERENCE	PENALTY, CHARGE, OR OTHER ENFORCEMENT
1	Expand Public Information Campaign			No
1	Provide Rebates on Plumbing Fixtures and Devices			No
1	Provide Rebates for Landscape Irrigation Efficiency			No
1	Provide Rebates for Turf Replacement			No
1	Other - Require automatic shut of hoses			Yes
1	CII - Restaurants may only serve water upon request	1 AFY		Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation			Yes
2	Landscape - Limit landscape irrigation to specific times	2 AFY	Watering shall not take place between the hours of 10:00 am and 4:00 pm	Yes
2	Other - Prohibit use of potable water for washing hard surfaces			Yes
3	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water			Yes
3	Other - Prohibit use of potable water for construction and dust control	2 AFY		Yes
3	Other water feature or swimming pool restriction		Draining of pools or refilling shall be done only for health or safety reasons.	Yes
3	Landscape - Limit landscape irrigation to specific days	266 AFY		Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	77 AFY	Expeditious leak repair (within 72 hrs)	Yes
4	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	26 AFY	Expeditious leak repair (within 24 hrs)	Yes
4	Implement or Modify Drought Rate Structure or Surcharge			Yes
5	Implement or Modify Drought Rate Structure or Surcharge			Yes

1.4.2 Supply Augmentation

Given the City's sufficient supply, the City has no immediate plan to augment supply in response to shortages. During dry years, the City can utilize stored SWP from the San Luis Reservoir as available or extract additional groundwater as needed while abiding by any safe yield restrictions on the basin.

1.4.3 Operational Changes

During shortage conditions, operations may be affected by demand reduction responses. Operational changes to address a short-term water shortage may be implemented based on the severity of the reduction goal. The City will maximize its groundwater supply by implementing operational strategies and demand reduction measures. As part of the Annual Assessment process, the City will consider their operational procedures at the time of a shortage to identify changes that can be implemented to address water shortage on a short-term basis, include but not limited to:

- Expansion of public information campaign to educate and inform customers of the water shortage emergency and required water savings
- Water conservation newsletter and water conservation webpage both include updated water information, water conservation tips, information about water conservation programs by the City and other agencies.
- Specify the days and/or hours during which water users may irrigate;
- Require users to supply their own drinking and cooking water;
- Hold all customers to specified maximum usages of water for each category of users;
- Take any other action which the City Council deems necessary to protect the public health or safety, prevent contamination of wells or other sources of water, or ensure an adequate water supply;
- Improve the efficiency of groundwater nitrate treatment by blending and/or matching the well supply to the input capabilities of the RO system by fine tuning the pump output with the installation of SCADA or installing a day tank ahead of the WTF.

1.4.4 Additional Mandatory Restrictions

In addition to the mandatory conservation and rationing measures imposed in Stages 1 through 5, the City Council and the Public Works Director are authorized to take further actions including:

- Limit irrigation to specified hours, or prohibit irrigation;
- Prohibit the filling or refilling of swimming pools, hot tubs or spas.
- Outdoor irrigation resulting in excessive runoff is prohibited
- Using potable water for street washing is prohibited
- Any use which results in excessive gutter runoff is prohibited
- Washing boats, marinas, buildings and outdoor paved areas is prohibited
- Emptying and refilling swimming pools and commercial spas is prohibited
- The use of potable water for compaction, dust control and construction purposes is prohibited
- Any water use that results in gutter runoff is prohibited

1.4.5 Emergency Response Plan

In 2021, the City will complete a Risk and Resilience Assessment (RRA) and Emergency Response Plan (ERP) in accordance with America's Water Infrastructure Act (AWIA) of 2018. The purpose of the RRA and ERP is to meet the AWIA compliance requirements and plan for long-term resilience of the City's infrastructure. The RRA will assess the City's water system to identify critical assets and processes that may be vulnerable to human and natural hazards, and to identify measures that can be taken to reduce risk and enhance resilience from service disruption for the benefit of customers. The RRA identifies and characterizes both infrastructure-specific and system-wide vulnerabilities and threats and quantifies the consequences of disruption. The RRA also identifies various options (and constraints) in addressing and mitigating risk. The RRA, in conjunction with the ERP, charts a course for water system resilience. The RRA also provided various recommendations to increase reliability of the City's system. Since critical pieces of infrastructure and specific vulnerabilities are detailed in the RRA and ERP, the contents of the document are confidential and for use by the City's staff only. However, the City can confirm that these plans meet the requirements set forth by AWIA and evaluate seismic risks and mitigation actions to the City's infrastructure.

In the event of a water shortage emergency resulting from equipment failure, power outage, or other catastrophe the City may implement its five-stage plan for conservation, as described above, with either voluntary or mandatory reductions depending on the severity of the shortage. For severe disasters (Stage 5), mandatory water use reductions are specified.

A catastrophic supply interruption can occur when the City loses one or more of its main water supplies. The likelihood of experiencing a simultaneous loss of more than one supply is low. For instance, local power outages may limit use of groundwater, but the City has stand-by emergency generators to assist in times of short-term power outages. If the available supply is insufficient to meet the demand and water quality requirements, an emergency notification will be sent to all water customers, to inform them of the condition. The message will include the expected duration of the condition, and restrictions on water use for the duration of the condition. Additional actions which The City will implement during a catastrophic interruption of water supply due to an earthquake are outlined below:

- Assess the condition of the water supply system. Arrange to provide emergency water (e.g., use of groundwater supplies in the event of non-availability of the SWP water).
- Identify priorities including hospitals, schools, and other emergency operation centers.
- Complete the damage assessment checklist for reservoirs, water treatment plants, wells and boosters, system transmission and distribution.
- Coordinate with fire district to identify immediate firefighting needs.
- Determine any health hazard of the water supply and issue any notification to the customers, if necessary.
- Make arrangements to conduct bacteriological tests, in order to determine possible contamination.

1.4.6 Seismic Risk Assessment and Mitigation Plan

Disasters, such as earthquakes, can and will occur without notice. Refer to the 2019 San Luis Obispo County Multi-Jurisdictional Hazard Mitigation Plan (**Appendix J**) Section 5.3.10 for Seismic Risk Assessment and Section 7 for Mitigation Plan procedures.

1.4.7 Shortage Response Action Effectiveness

The City determines the actual reduction in water use through metering. Data from production meters and from customer usage meters is used to analyze the water conservation impacts during shortages. Additionally, customers can track their usage as recorded on their monthly water bill.

Additionally, the City tracks actual reductions in water use based on the water shortage contingency analysis, by monitoring system demands at each of the City's five water tank sites using the Supervisory Control and Data Acquisition (SCADA) system. The SCADA system tracks current production as well as tank levels giving information on demands. Water use analysis can be performed on a daily and/or weekly basis depending on monitoring needs, and customer usage is analyzed monthly.

Estimates of the effectiveness for actions have been included in **Table 1-3**. It is assumed that a given required shortage to be addressed in each level can be met by quantifiable measures and the remainder of shortage can be addressed by unquantifiable measures, both from **Table 1-4**, operations changes and additional mandatory restrictions. It is expected that response actions effectiveness is also a result of successful communication and outreach efforts.

1.5 Communication Protocols

This section is in accordance with CWC Section 10632(a)(5) and describes the communication protocols and procedures to inform customers, the public, and state and local officials of any current or predicted water shortages. When a shortage level is enacted or changed, a notice is sent to all water customers in their water bill and the City's website updated. Based on the severity of the shortage condition, the City may also advertise on the local Channel 20 what the shortage conditions are and ways to save water. The city website contains various brochures and links to ways water customers can conserve water indoors and outdoors. When the City moves to severely restricted water supply notices are provided containing the mandatory water restrictions to all visitor serving facilities. The notice is to be displayed by the facility in a prominent area to educate Morro Bays visitors. The city has an active Facebook and Nextdoor account and will provide water conservation messaging as deemed necessary.

1.6 Compliance and Enforcement

The City's WSCP enforces prohibitions and assesses penalties for prohibited water use violation as described below:

- If customer violates irrigation restrictions, the City shall turn off the customer's water after giving written notice to the customer;
- If customer flagrantly wastes water, the City shall turn off the customer's water after giving written notice to the customer;
- If customer fails to repair leaks within three days of notification, the City shall turn off the customer's water after giving written notice to the customer;
- If limits to maximum usages of water are set and a customer violates that use, the customer may be assessed a penalty of $3 per hundred cubic feet (hcf) of water used over the maximum.

1.7 Legal Authorities

The City's WSCP is found in the City's municipal code of ordinances within Chapter 13.04 Water Service and Rates. Within Chapter 13.04, Section VII Emergencies includes the four subsections which comprise the City's WSCP. The WSCP's four subsections are detailed as:

- Section 13.04.320 Determination of low water levels - Grants the City Council authority to declare when a low water level condition exists.
- Section 13.04.330 Council water conservation powers - Identifies the water conservation powers of the City Council when it is deemed necessary to conserve water during low water level periods.
- Section 13.04.340 Public works director powers - Identifies the legal authority of the Public Works Director to enforce water conservation measures if the City Council adopts a resolution declaring a low water level or water system emergency.
- Section 13.04.345 Mandatory water conservation requirements - Identifies the mandatory water conservation requirements for the five increasing levels, or stages, of conservation as the City's water supplies are reduced during drought conditions.

Under State law, the City is authorized after declaration of a water shortage emergency to restrict the water uses and to prohibit the waste or use of the City's water during such periods for any purpose other than domestic use, sanitation, fire protection or such other uses as may be determined by the City Council.

The City shall coordinate with San Louis Obispo County, within which it provides water supply services, for the possible proclamation of a local emergency, as defined in Section 8558 of the Government Code.

1.8 Financial Consequences of WSCP

The majority of the operating costs for most water agencies are fixed rather than a function of the amount of water sold. As a result, when significant conservation programs are undertaken, it is frequently necessary to raise water rates because the revenue generated is based on lower total consumption while the revenue required is basically fixed. In order to counteract the financial impact of conservation, the City may institute Water Shortage Emergency Rates so that lower projected water consumption would generate added revenue needed by the City.

The Water Shortage Emergency Rates are designed to help the water enterprise remain financially stable during periods of emergency water shortages and reduced water sales. In 2015, the City Council held a public hearing and approved Resolution No. 30-15, which adopts water rate increases and establishes Water Shortage Emergency Rates.

The Water Shortage Emergency Rates help the City remain financially stable during periods of emergency water shortages and reduced water sales. These rates apply to metered water use. Pursuant to California law, any applied Water Shortage Emergency Rates will not exceed the City's cost of providing service. The City only implements Water Shortage Emergency Rates, as needed, to support financial stability under a more-severe Stage 4 or Stage 5 water shortage emergency.

The City is also required, by agreement with Central Coast Water Authority, to maintain a financial reserve of 25 percent of annual operating costs. There is no specific City policy authorizing the use of such reserves for drought-related financial shortfalls.

In the event Water Division funds were significantly affected by drought-related shortfalls, capital projects could be delayed or an internal service loan from either the General Fund or Wastewater Fund could be implemented. Internal service loan(s) would require Council approval.

1.9 Monitoring and Reporting

This section is in accordance with CWC Section 10632(a)(9) and describes the reporting requirements and monitoring procedures to implement the WSCP and track and evaluate the response actions effectives.

As described in **Section 1.2**, the City intends to track its supplies and project demands on an annual basis, and if supply conditions described in **Table 1-2** are projected, the City will enact their WSCP. Monitoring demands is essential to ensure the WSCP response actions are adequately meeting reductions and decreasing the supply/demand gap. This will help to analyze the effectiveness of the WSCP or identify the need to activate additional response actions.

The water savings from implementation of the WSCP will be determined based on monthly production reports which will be compared to the supply from prior months, the same period of the prior year, and/or the allocation. At first, the cumulative consumption for the various sectors (e.g., residential, commercial, etc.) will be evaluated for reaching the target demand reduction level. Then, if needed, individual accounts will be monitored. Weather and other possible influences may be accounted for in the evaluation.

1.10 WSCP Refinement Procedures

This section is consistent with CWC Section 10632 (a)(10). The WSCP is best prepared and implemented as an adaptive management plan. The City will use results obtained from monitoring and reporting procedures (described in **Section 1.9**) to evaluate any needs for revisions. The WSCP is used to provide guidance to the Council, staff, and the public by identifying response actions to allow for efficient management of any water shortage with predictability and accountability.

To maintain a useful and efficient standard of practice in water shortage conditions, the requirements, criteria, and response actions need to be continually evaluated and improved upon to ensure that its shortage risk tolerance is adequate, and the shortage response actions are effective and up to date based on lessons learned from implementing the WSCP. Potential changes to the WSCP that would warrant an update include, but are not limited to, any changes to shortage level triggers, changes to the shortage level structure, and/or changes to the response actions. Any prospective changes to the WSCP would need to be presented at a public hearing, staff would obtain any comments and City Council would adopt the updated WSCP. The steps to formally amend the WSCP are discussed in **Section 1.12**.

Potential refinements will be documented and integrated in the next WSCP update. If new response actions are identified by staff or public, these could be advertised as voluntary actions until these are formally adopted as mandatory.

1.11 Special Water Feature Distinction

The CWC Section 10623 (b) now requires that suppliers analyze and define water features that are artificially supplied with water, including ponds, lakes, waterfalls, and fountains, separately from swimming pools and spas, as defined in subdivision (a) of Section 115921 of the Health and Safety Code. Non-pool or non-spa water features may use or be able to use recycled water, whereas pools

and spas must use potable water for health and safety considerations so limitations to pools and spas may require different considerations compared to non-pool or non-spa water features.

1.12 Plan Adoption, Submittal, and Availability

This section was completed pursuant to CWC Section 10632(a)(c). Because the WSCP is a standalone document that can be updated as needed.

This 2020 WSCP was presented for adoption to the City Council at the October 12, 2021 Council meeting. Notifications were sent to all necessary Cities, Counties, and Districts 60 days prior to the October 12, 2021 public board meeting. To comply with the notice to the public, the City published notices in the local newspaper two weeks in advance with 5 days between publications. Copies of the 60-day notices and public hearing newspaper notices are provided in **Appendix B**. The WSCP was also made available in advance of the public hearing.

The WSCP was formally adopted on October 12, 2021 by the City Council through Resolution 67-21, included as **Attachment 1**. The WSCP was made available to all staff, customers, and any affected cities, counties, or other members of the public at the City and online within 30 days of the adoption date.

1.13 Resources and References

American Water Works Association (AWWA). (2019). *Manual of Water Supply Practices, Drought Preparedness and Response.*

Department of Water Resources. (2020). *Urban Water Management Plan Guidebook 2020.*

Water Systems Consulting Inc. (August 2021). *City of Morro Bay 2020 UWMP.*

Attachment 1: Adoption Resolution

RESOLUTION NO. 67-21

**RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF MORRO BAY, CALIFORNIA
ADOPTING THE WATER SHORTAGE CONTINGENCY PLAN**

**THE CITY COUNCIL
City of Morro Bay, California**

WHEREAS, the California Urban Water Management Planning Act, Water Code Section 10610 et seq. (the Act), mandates that every urban supplier of water providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre feet of water annually, prepare an Urban Water Management Plan (UWMP); and

WHEREAS, as part of the UWMP, Water Code section 10632 requires urban water suppliers to prepare and adopt a Water Shortage Contingency Plan (WSCP); and

WHEREAS, the City of Morro Bay meets the Act's definition of an urban retail water supplier required to submit an UWMP and WSCP; and

WHEREAS, a WSCP is a standalone document that is created separately from the UWMP and included as part of the UWMP; and

WHEREAS, on August 9, 2021, the City of Morro Bay issued a notice of preparation of the Draft 2020 UWMP and WSCP for review and comment; and

WHEREAS, on September 28, 2021 the City of Morro Bay issued a notice of public hearing and availability of the Draft 2020 UWMP and WSCP for review and comment; and

WHEREAS, on October 12, 2021 the Morro Bay City Council conducted a public hearing pursuant to California Water Code sections 10642 and 10608.26 to consider and receive input on the Draft 2020 UWMP and WSCP; and

WHEREAS, all prerequisites to adoption of the WSCP have occurred.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Morro Bay, California:

1. The facts set forth in the Recitals are true and correct.

2. The City hereby adopts the 2020 WSCP www.morrobayca.gov/WSCP , for the City of Morro Bay and authorizes it to be filed with the California Department of Water Resources.

3. The Council finds and determines that, under the California Water Code Section 10652, the adoption of the WSCP and this resolution does not constitute a project under the California Environmental Quality Act.

4. The City Clerk is directed to file a certified copy of the attached WSCP with the California State Department of Water Resources and take all other necessary further administrative action for adoption of the WSCP.

5. This resolution shall take effect immediately upon its adoption by the City Council.

PASSED AND ADOPTED by the City Council of the City of Morro Bay at a regular meeting thereof held on the 12th day of October 2021 by the following vote:

AYES: Headding, Addis, Barton, Ford, Heller
NOES: None
ABSENT: None

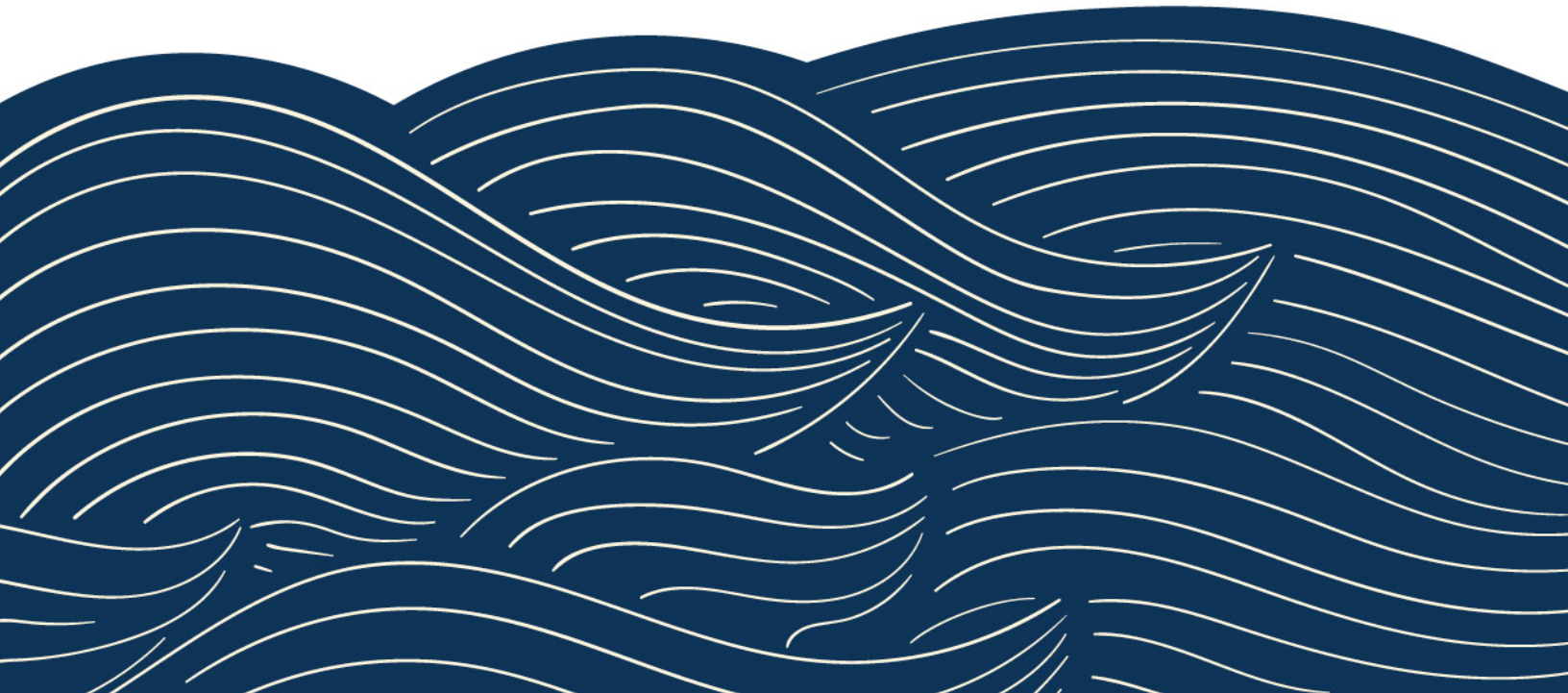
JOHN HEADDING, Mayor

ATTEST:

DANA SWANSON, City Clerk

H

Groundwater Permits



STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20841

Application 27477 of City of Morro Bay

595 Harbor Street, Morro Bay, CA 93442

filed on August 13, 1982, has been approved by the State Water Resources Control Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source: Morro Creek Subterranean Stream

Tributary to: Pacific Ocean

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	Section *	Township	Range	Base and Meridian
By California Coordinate System, Zone 5 Well No. 1 - North 695,740 feet and East 1,148,170 feet	SW¼ of NW¼	25	29S	10E	MD
Well No. 2 - North 695,880 feet and East 1,148,090 feet	SW¼ of NW¼	25	29S	10E	MD
Well No. 3 - North 696,060 feet and East 1,149,040 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 4 - North 696,010 feet and East 1,149,040 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 13 - North 696,180 feet and East 1,149,900 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 14 - North 695,960 feet and East 1,149,060 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 15 - North 695,850 feet and East 1,149,120 feet	NE¼ of NW¼	25	29S	10E	MD

County of San Luis Obispo

* projected fractional

Application 27477 Permit 20841

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Municipal	Within the boundaries of the City of Morro Bay's service area					

The place of use is shown on map on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.13 cubic foot per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 91 acre-feet per year. (0000005)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Complete application of the water to the authorized use shall be made by December 31, 2001. (0000009)

8. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

9. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

10. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

11. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

12. The equivalent of the authorized continuous flow allowance for any 30-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed. (0000027)

13. Permittee shall consult with the Division of Water Rights and, within one year from the date of this permit, shall submit to the State Water Resources Control Board its Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

All cost-effective measures identified in the Urban Water Management Plan and any supplements thereto shall be implemented in accordance with the schedule for implementation found therein. (000029A)

Application 27477 Permit 20841

14. The total quantity of water diverted under this permit, together with that diverted under the permit issued pursuant to Application 24246, shall not exceed 581 acre-feet per year. (0000114)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: May 28, 1996

STATE WATER RESOURCES CONTROL BOARD

Roger A. Reynolds

for Chief, Division of Water Rights

WR 14-2 (6-94)

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20840

Application 24246 of City of Morro Bay

595 Harbor Street, Morro Bay, CA 93442

filed on November 22, 1972, has been approved by the State Water Resources Control Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source: Morro Creek Subterranean Stream

Tributary to: Pacific Ocean

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	Section *	Township	Range	Base and Meridian
By California Coordinate System, Zone 5 Well No. 1 - North 695,740 feet and East 1,148,170 feet	SW¼ of NW¼	25	29S	10E	MD
Well No. 2 - North 695,880 feet and East 1,148,090 feet	SW¼ of NW¼	25	29S	10E	MD
Well No. 3 - North 696,060 feet and East 1,149,040 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 4 - North 696,010 feet and East 1,149,040 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 13 - North 696,180 feet and East 1,149,900 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 14 - North 695,960 feet and East 1,149,060 feet	NE¼ of NW¼	25	29S	10E	MD
Well No. 15 - North 695,850 feet and East 1,149,120 feet	NE¼ of NW¼	25	29S	10E	MD

County of San Luis Obispo

* projected fractional

Application 24246 Permit 20840

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Municipal	Within the boundaries of the City of Morro Bay's service area					

The place of use is shown on map on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 1.07 cubic feet per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 490 acre-feet per year. (0000005)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Complete application of the water to the authorized use shall be made by December 31, 2001. (0000009)

8. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

9. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

10. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

11. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

12. The equivalent of the authorized continuous flow allowance for any 30-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed. (0000027)

13. Permittee shall consult with the Division of Water Rights and, within one year from the date of this permit, shall submit to the State Water Resources Control Board its Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

All cost-effective measures identified in the Urban Water Management Plan and any supplements thereto shall be implemented in accordance with the schedule for implementation found therein. (000029A)

Application 24246 Permit 20840

14. The total quantity of water diverted under this permit, together with that diverted under the permit issued pursuant to Application 27477, shall not exceed 581 acre-feet per year. (0000114)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: May 28, 1996

STATE WATER RESOURCES CONTROL BOARD

for Chief, Division of Water Rights

WR 14-2 (6-94)

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20868

Application 27386 of City of Morro Bay

595 Harbor Street, Morro Bay, CA 93442

filed on July 9, 1982, has been approved by the State Water Resources Control Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source:

Chorro Creek Subterranean Stream

Tributary to:

Morro Bay thence

Pacific Ocean

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	Section *	Township	Range	Base and Meridian
By California Coordinate System, Zone 5 Well No. 9 - North 688,080 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 9A - North 688,410 feet and East 1,161,790 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10 - North 688,160 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10A - North 688,450 feet and East 1,161,280 feet	NW¼ of SE¼	32	29S	11E	MD
Well No. 11A - North 685,779 feet and East 1,168,095 feet	NW¼ of NW¼	3	30S	11E	MD
Well No. 12 - North 687,900 feet and East 1,162,020 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 16 - North 688,400 feet and East 1,161,900 feet	NE¼ of SE¼	32	29S	11E	MD

County of San Luis Obispo

* projected fractional

Application 27386 Permit 20868

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Municipal	Within the boundaries of the City of Morro Bay's service area					

The place of use is shown on map on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.3 cubic foot per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 217.5 acre-feet per year. (0000005)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Complete application of the water to the authorized use shall be made by December 31, 2001. (0000009)

8. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

9. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

10. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

11. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

12. The equivalent of the authorized continuous flow allowance for any 30-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed. (0000027)

13. Permittee shall consult with the Division of Water Rights and, within one year from the date of this permit, shall submit to the State Water Resources Control Board its Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

All cost-effective measures identified in the Urban Water Management Plan and any supplements thereto shall be implemented in accordance with the schedule for implementation found therein. (000029A)

14. The total quantity of water diverted under this permit, together with that diverted under the permits issued pursuant to Applications 24239 and 24245, shall not exceed 1,142.5 acre-feet per year. (0000114)

15. For the protection of fish and wildlife habitat and other public trust resources in Chorro Creek and Morro Bay, beginning when deliveries are available from the State Water Project Permittee shall:

a. Cease all diversions from Well 11A (Romero well field), or from any wells constructed or operated as replacement wells for Well 11A, whenever surface flow measured in Chorro Creek downstream of the reach depleted by extractions of ground water from Well 11A, or other wells as described above, is less than 1.4 cubic feet per second; and

b. Cease all diversions from Wells 9, 9A, 10, 10A, 12, and 16 (Ashurst well field), or from any wells constructed or operated as replacement wells for the Ashurst well field, whenever surface flow measured in Chorro Creek downstream of the Ashurst well field is less than 1.4 cubic feet per second. (0350900)

16. Permittee may, at its option, seek a waiver of term 15b by conducting a study and providing the Chief, Division of Water Rights, with quantitative evidence that ground water extraction from the Ashurst well field does not deplete surface flow in Chorro Creek. The evidence shall be provided in a report which also specifies the reach of the creek and portion of the alluvial aquifer studied and a description and justification of the methodology used to measure stream depletion. The State Water Resources Control Board reserves jurisdiction over this permit to determine whether to waive term 15b. Any action to waive term 15b shall be taken only after notice to interested parties and opportunity for hearing. (0000999)

17. No later than January 1, 1997, Permittee shall install devices which are capable of continuous measurements of surface flow in Chorro Creek to document compliance with the minimum surface flow conditions of this Permit. One measuring device shall be installed in Chorro Creek downstream of the Romero well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Romero well field, but upstream of the depletion effects caused by nearby pumpers on surface flow in Chorro Creek. Another measuring device shall be installed in the Chorro Creek downstream of the Ashurst well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Ashurst well field, but upstream of the depletion effects caused by nearby pumpers on surface flows in Chorro Creek. In the case of overlapping pumping effects between the City and a nearby pumper, a compromise location shall be selected. These measuring devices shall be continuously operated and properly maintained by Permittee. In the event that either of these devices is rendered inoperable due to relocation of the Chorro Creek stream channel, Permittee shall move the measuring device to a suitable location in the new stream channel within 60 days after surface flows are rediverted into the new stream channel. The measuring devices and their locations shall be approved by the Chief of the Division of Water Rights. A description and justification of the measuring devices and their locations shall be submitted for approval no later than July 1, 1996. (0060900) (0490700)

18. By March 1 of each year, Permittee shall submit a report to the Chief, Division of Water Rights, documenting compliance with the minimum surface flow conditions of this Permit. The report shall contain:

a. A list of dates and times during the previous calendar year when water was pumped at each of Permittee's points of diversion under this Permit; and

b. For each of the dates and times listed in paragraph a. (above) the corresponding minimum surface flows measured in Chorro Creek at each of the surface flow measuring devices. (0060700) (0090700)

19. Permittee shall cease all diversions from the Romero well field, or from any wells constructed or operated as replacements for wells in the Romero well field, whenever instantaneous surface flow in Chorro Creek measured at the Canet Road stream gage is less than 0.85 cubic foot per second. This term shall be in effect until deliveries are available from the State Water Project. (0350900)

20. At such time as permittee is diverting water authorized under this permit and the water level in one or more of the wells operated on the Coastal San Luis Resource Conservation District property, the Roemer/Jones property, the Gary and Joyce Williams property, or their successors in interest, for valid riparian and/or pre-1914 appropriative uses of water from the Chorro Creek subterranean stream, reaches a depth which renders the well or wells unusable, permittee shall either:

a. Stop its diversion until conditions are such that the well or wells is/are again usable, or

b. Deliver water to the riparian/pre-1914 appropriative place of use served by the well or wells.

The riparian/pre-1914 appropriative diverter shall bear the estimated costs which would have been incurred to pump water from the affected well or wells. In the absence of an agreement between the permittee and the other parties relative to pumping costs, the costs shall be based on an average amount per acre-foot for pumping water from the affected well or wells during the month in question over the prior three years. Permittee shall pay the cost of installing and maintaining any water conveyance facilities needed to deliver water to the riparian/pre-1914 appropriative place of use.

Application 27386 Permit 20868

The State Water Resources Control Board reserves jurisdiction to modify this permit term based on findings that the methods of diversion and/or uses of water of the riparian and pre-1914 appropriative diverters identified in this term are wasteful or unreasonable pursuant to Article X, Section 2 of the California Constitution. Any modification of this term will occur only after notice to interested parties and opportunity for hearing. (0000600) (0350900) (0280800)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: August 21, 1996

STATE WATER RESOURCES CONTROL BOARD

Roger K. Lum

for Chief, Division of Water Rights

WR 14-2 (6-94)

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20867

Application 24245 of City of Morro Bay

595 Harbor Street, Morro Bay, CA 93442

filed on November 22, 1972, has been approved by the State Water Resources Control Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source: Chorro Creek Subterranean Stream

Tributary to: Morro Bay thence Pacific Ocean

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	Section *	Township	Range	Base and Meridian
By California Coordinate System, Zone 5 Well No. 9 - North 688,080 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 9A - North 688,410 feet and East 1,161,790 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10 - North 688,160 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10A - North 688,450 feet and East 1,161,280 feet	NW¼ of SE¼	32	29S	11E	MD
Well No. 11A - North 685,779 feet and East 1,168,095 feet	NW¼ of NW¼	3	30S	11E	MD
Well No. 12 - North 687,900 feet and East 1,162,020 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 16 - North 688,400 feet and East 1,161,900 feet	NE¼ of SE¼	32	29S	11E	MD

County of San Luis Obispo

* projected fractional

Application 24245 Permit 20867

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Municipal	Within the boundaries of the City of Morro Bay's service area					

The place of use is shown on map on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 2.02 cubic feet per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 535 acre-feet per year. (0000005)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Complete application of the water to the authorized use shall be made by December 31, 2001. (0000009)

8. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

9. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

10. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

11. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

12. The equivalent of the authorized continuous flow allowance for any 30-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed. (0000027)

13. Permittee shall consult with the Division of Water Rights and, within one year from the date of this permit, shall submit to the State Water Resources Control Board its Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

All cost-effective measures identified in the Urban Water Management Plan and any supplements thereto shall be implemented in accordance with the schedule for implementation found therein. (000029A)

14. The total quantity of water diverted under this permit, together with that diverted under the permits issued pursuant to Applications 24239 and 27386, shall not exceed 1,142.5 acre-feet per year. (0000114)

15. For the protection of fish and wildlife habitat and other public trust resources in Chorro Creek and Morro Bay, beginning when deliveries are available from the State Water Project Permittee shall:

a. Cease all diversions from Well 11A (Romero well field), or from any wells constructed or operated as replacement wells for Well 11A, whenever surface flow measured in Chorro Creek downstream of the reach depleted by extractions of ground water from Well 11A, or other wells as described above, is less than 1.4 cubic feet per second; and

b. Cease all diversions from Wells 9, 9A, 10, 10A, 12, and 16 (Ashurst well field), or from any wells constructed or operated as replacement wells for the Ashurst well field, whenever surface flow measured in Chorro Creek downstream of the Ashurst well field is less than 1.4 cubic feet per second. (0350900)

16. Permittee may, at its option, seek a waiver of term 15b by conducting a study and providing the Chief, Division of Water Rights, with quantitative evidence that ground water extraction from the Ashurst well field does not deplete surface flow in Chorro Creek. The evidence shall be provided in a report which also specifies the reach of the creek and portion of the alluvial aquifer studied and a description and justification of the methodology used to measure stream depletion. The State Water Resources Control Board reserves jurisdiction over this permit to determine whether to waive term 15b. Any action to waive term 15b shall be taken only after notice to interested parties and opportunity for hearing. (0000999)

17. No later than January 1, 1997, Permittee shall install devices which are capable of continuous measurements of surface flow in Chorro Creek to document compliance with the minimum surface flow conditions of this Permit. One measuring device shall be installed in Chorro Creek downstream of the Romero well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Romero well field, but upstream of the depletion effects caused by nearby pumpers on surface flow in Chorro Creek. Another measuring device shall be installed in Chorro Creek downstream of the Ashurst well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Ashurst well field, but upstream of the depletion effects caused by nearby pumpers on surface flows in Chorro Creek. In the case of overlapping pumping effects between the City and a nearby pumper, a compromise location shall be selected. These measuring devices shall be continuously operated and properly maintained by Permittee. In the event that either of these devices is rendered inoperable due to relocation of the Chorro Creek stream channel, Permittee shall move the measuring device to a suitable location in the new stream channel within 60 days after surface flows are rediverted into the new stream channel. The measuring devices and their locations shall be approved by the Chief of the Division of Water Rights. A description and justification of the measuring devices and their locations shall be submitted for approval no later than July 1, 1996. (0060900) (0490700)

18. By March 1 of each year, Permittee shall submit a report to the Chief, Division of Water Rights, documenting compliance with the minimum surface flow conditions of this Permit. The report shall contain:

a. A list of dates and times during the previous calendar year when water was pumped at each of Permittee's points of diversion under this Permit; and

b. For each of the dates and times listed in paragraph a. (above) the corresponding minimum surface flows measured in Chorro Creek at each of the surface flow measuring devices. (0060700) (0090700)

19. Permittee shall cease all diversions from the Romero well field, or from any wells constructed or operated as replacements for wells in the Romero well field, whenever instantaneous surface flow in Chorro Creek measured at the Canet Road stream gage is less than 0.85 cubic foot per second. This term shall be in effect until deliveries are available from the State Water Project. (0350900)

20. At such time as permittee is diverting water authorized under this permit and the water level in one or more of the wells operated on the Coastal San Luis Resource Conservation District property, the Roemer/Jones property, the Gary and Joyce Williams property, or their successors in interest, for valid riparian and/or pre-1914 appropriative uses of water from the Chorro Creek subterranean stream, reaches a depth which renders the well or wells unusable, permittee shall either:

a. Stop its diversion until conditions are such that the well or wells is/are again usable, or

b. Deliver water to the riparian/pre-1914 appropriative place of use served by the well or wells.

The riparian/pre-1914 appropriative diverter shall bear the estimated costs which would have been incurred to pump water from the affected well or wells. In the absence of an agreement between the permittee and the other parties relative to pumping costs, the costs shall be based on an average amount per acre-foot for pumping water from the affected well or wells during the month in question over the prior three years. Permittee shall pay the cost of installing and maintaining any water conveyance facilities needed to deliver water to the riparian/pre-1914 appropriative place of use.

Application 24245 Permit 20867

The State Water Resources Control Board reserves jurisdiction to modify this permit term based on findings that the methods of diversion and/or uses of water of the riparian and pre-1914 appropriative diverters identified in this term are wasteful or unreasonable pursuant to Article X, Section 2 of the California Constitution. Any modification of this term will occur only after notice to interested parties and opportunity for hearing. (0000600)
(0350900)
(0280800)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: August 21, 1996

STATE WATER RESOURCES CONTROL BOARD

for Chief, Division of Water Rights

WR 14-2 (6-94)

STATE OF CALIFORNIA
CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
STATE WATER RESOURCES CONTROL BOARD

DIVISION OF WATER RIGHTS

PERMIT FOR DIVERSION AND USE OF WATER

PERMIT 20866

Application 24239 of City of Morro Bay

595 Harbor Street, Morro Bay, CA 93442

filed on November 3, 1972, has been approved by the State Water Resources Control Board SUBJECT TO PRIOR RIGHTS and to the limitations and conditions of this permit.

Permittee is hereby authorized to divert and use water as follows:

1. Source: Chorro Creek Subterranean Stream

Tributary to: Morro Bay thence Pacific Ocean

2. Location of point of diversion:	40-acre subdivision of public land survey or projection thereof	Section *	Township	Range	Base and Meridian
By California Coordinate System, Zone 5 Well No. 9 - North 688,080 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 9A - North 688,410 feet and East 1,161,790 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10 - North 688,160 feet and East 1,161,780 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 10A - North 688,450 feet and East 1,161,280 feet	NW¼ of SE¼	32	29S	11E	MD
Well No. 11A - North 685,779 feet and East 1,168,095 feet	NW¼ of NW¼	3	30S	11E	MD
Well No. 12 - North 687,900 feet and East 1,162,020 feet	NE¼ of SE¼	32	29S	11E	MD
Well No. 16 - North 688,400 feet and East 1,161,900 feet	NE¼ of SE¼	32	29S	11E	MD

County of San Luis Obispo

* projected fractional

Application 24239 Permit 20866

3. Purpose of use:	4. Place of use:	Section	Township	Range	Base and Meridian	Acres
Municipal	Within the boundaries of the City of Morro Bay's service area					

The place of use is shown on map on file with the State Water Resources Control Board.

5. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 0.851 cubic foot per second to be diverted from January 1 to December 31 of each year. The maximum amount diverted under this permit shall not exceed 390 acre-feet per year. (0000005)

6. The amount authorized for appropriation may be reduced in the license if investigation warrants. (0000006)

7. Complete application of the water to the authorized use shall be made by December 31, 2001. (0000009)

8. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until a license is issued. (0000010)

9. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit. (0000011)

10. Pursuant to California Water Code Sections 100 and 275, and the common law public trust doctrine, all rights and privileges under this permit and under any license issued pursuant thereto, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to protect public trust uses and to prevent waste, unreasonable use, unreasonable method of use or unreasonable method of diversion of said water.

The continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to eliminating waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement a water conservation plan, features of which may include but not necessarily be limited to (1) reusing or reclaiming the water allocated; (2) using water reclaimed by another entity instead of all or part of the water allocated; (3) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (4) suppressing evaporation losses from water surfaces; (5) controlling phreatophytic growth; and (6) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

The continuing authority of the Board also may be exercised by imposing further limitations on the diversion and use of water by the permittee in order to protect public trust uses. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such action is consistent with California Constitution Article X, Section 2; is consistent with the public interest; and is necessary to preserve or restore the uses protected by the public trust. (0000012)

11. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges. (0000013)

12. The equivalent of the authorized continuous flow allowance for any 30-day period may be diverted in a shorter time, provided there is no interference with other rights and instream beneficial uses, and provided further that all terms and conditions protecting instream beneficial uses are observed. (0000027)

13. Permittee shall consult with the Division of Water Rights and, within one year from the date of this permit, shall submit to the State Water Resources Control Board its Urban Water Management Plan as prepared and adopted in conformance with Section 10610, et seq. of the California Water Code, supplemented by any additional information that may be required by the Board.

All cost-effective measures identified in the Urban Water Management Plan and any supplements thereto shall be implemented in accordance with the schedule for implementation found therein. (000029A)

14. The total quantity of water diverted under this permit, together with that diverted under the permits issued pursuant to Applications 24245 and 27386, shall not exceed 1,142.5 acre-feet per year. (0000114)

15. For the protection of fish and wildlife habitat and other public trust resources in Chorro Creek and Morro Bay, beginning when deliveries are available from the State Water Project Permittee shall:

a. Cease all diversions from Well 11A (Romero well field), or from any wells constructed or operated as replacement wells for Well 11A, whenever surface flow measured in Chorro Creek downstream of the reach depleted by extractions of ground water from Well 11A, or other wells as described above, is less than 1.4 cubic feet per second; and

b. Cease all diversions from Wells 9, 9A, 10, 10A, 12, and 16 (Ashurst well field), or from any wells constructed or operated as replacement wells for the Ashurst well field, whenever surface flow measured in Chorro Creek downstream of the Ashurst well field is less than 1.4 cubic feet per second. (0350900)

16. Permittee may, at its option, seek a waiver of term 15b by conducting a study and providing the Chief, Division of Water Rights, with quantitative evidence that ground water extraction from the Ashurst well field does not deplete surface flow in Chorro Creek. The evidence shall be provided in a report which also specifies the reach of the creek and portion of the alluvial aquifer studied and a description and justification of the methodology used to measure stream depletion. The State Water Resources Control Board reserves jurisdiction over this permit to determine whether to waive term 15b. Any action to waive term 15b shall be taken only after notice to interested parties and opportunity for hearing. (0000999)

17. No later than January 1, 1997, Permittee shall install devices which are capable of continuous measurements of surface flow in Chorro Creek to document compliance with the minimum surface flow conditions of this Permit. One measuring device shall be installed in Chorro Creek downstream of the Romero well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Romero well field, but upstream of the depletion effects caused by nearby pumpers on surface flow in Chorro Creek. Another measuring device shall be installed in Chorro Creek downstream of the Ashurst well field at a location sufficient to detect the full depletion effects of Permittee's diversions from the Ashurst well field, but upstream of the depletion effects caused by nearby pumpers on surface flows in Chorro Creek. In the case of overlapping pumping effects between the City and a nearby pumper, a compromise location shall be selected. These measuring devices shall be continuously operated and properly maintained by Permittee. In the event that either of these devices is rendered inoperable due to relocation of the Chorro Creek stream channel, Permittee shall move the measuring device to a suitable location in the new stream channel within 60 days after surface flows are rediverted into the new stream channel. The measuring devices and their locations shall be approved by the Chief of the Division of Water Rights. A description and justification of the measuring devices and their locations shall be submitted for approval no later than July 1, 1996. (0060900) (0490700)

18. By March 1 of each year, Permittee shall submit a report to the Chief, Division of Water Rights, documenting compliance with the minimum surface flow conditions of this Permit. The report shall contain:

a. A list of dates and times during the previous calendar year when water was pumped at each of Permittee's points of diversion under this Permit; and

b. For each of the dates and times listed in paragraph a. (above) the corresponding minimum surface flows measured in Chorro Creek at each of the surface flow measuring devices. (0060700) (0090700)

19. Permittee shall cease all diversions from the Romero well field, or from any wells constructed or operated as replacements for wells in the Romero well field, whenever instantaneous surface flow in Chorro Creek measured at the Canet Road stream gage is less than 0.85 cubic foot per second. This term shall be in effect until deliveries are available from the State Water Project. (0350900)

20. At such time as permittee is diverting water authorized under this permit and the water level in one or more of the wells operated on the Coastal San Luis Resource Conservation District property, the Roemer/Jones property, the Gary and Joyce Williams property, or their successors in interest, for valid riparian and/or pre-1914 appropriative uses of water from the Chorro Creek subterranean stream, reaches a depth which renders the well or wells unusable, permittee shall either:

a. Stop its diversion until conditions are such that the well or wells is/are again usable, or

b. Deliver water to the riparian/pre-1914 appropriative place of use served by the well or wells.

The riparian/pre-1914 appropriative diverter shall bear the estimated costs which would have been incurred to pump water from the affected well or wells. In the absence of an agreement between the permittee and the other parties relative to pumping costs, the costs shall be based on an average amount per acre-foot for pumping water from the affected well or wells during the month in question over the prior three years. Permittee shall pay the cost of installing and maintaining any water conveyance facilities needed to deliver water to the riparian/pre-1914 appropriative place of use.

Application 24239 Permit ~~20866~~

The State Water Resources Control Board reserves jurisdiction to modify this permit term based on findings that the methods of diversion and/or uses of water of the riparian and pre-1914 appropriative diverters identified in this term are wasteful or unreasonable pursuant to Article X, Section 2 of the California Constitution. Any modification of this term will occur only after notice to interested parties and opportunity for hearing. (0000600) (0350900) (0280800)

This permit is issued and permittee takes it subject to the following provisions of the Water Code:

Section 1390. A permit shall be effective for such time as the water actually appropriated under it is used for a useful and beneficial purpose in conformity with this division (of the Water Code), but no longer.

Section 1391. Every permit shall include the enumeration of conditions therein which in substance shall include all of the provisions of this article and the statement that any appropriator of water to whom a permit is issued takes it subject to the conditions therein expressed.

Section 1392. Every permittee, if he accepts a permit, does so under the conditions precedent that no value whatsoever in excess of the actual amount paid to the State therefor shall at any time be assigned to or claimed for any permit granted or issued under the provisions of this division (of the Water Code), or for any rights granted or acquired under the provisions of this division (of the Water Code), in respect to the regulation by any competent public authority of the services or the price of the services to be rendered by any permittee or by the holder of any rights granted or acquired under the provisions of this division (of the Water Code) or in respect to any valuation for purposes of sale to or purchase, whether through condemnation proceedings or otherwise, by the State or any city, city and county, municipal water district, irrigation district, lighting district, or any political subdivision of the State, of the rights and property of any permittee, or the possessor of any rights granted, issued, or acquired under the provisions of this division (of the Water Code).

Dated: August 21, 1996

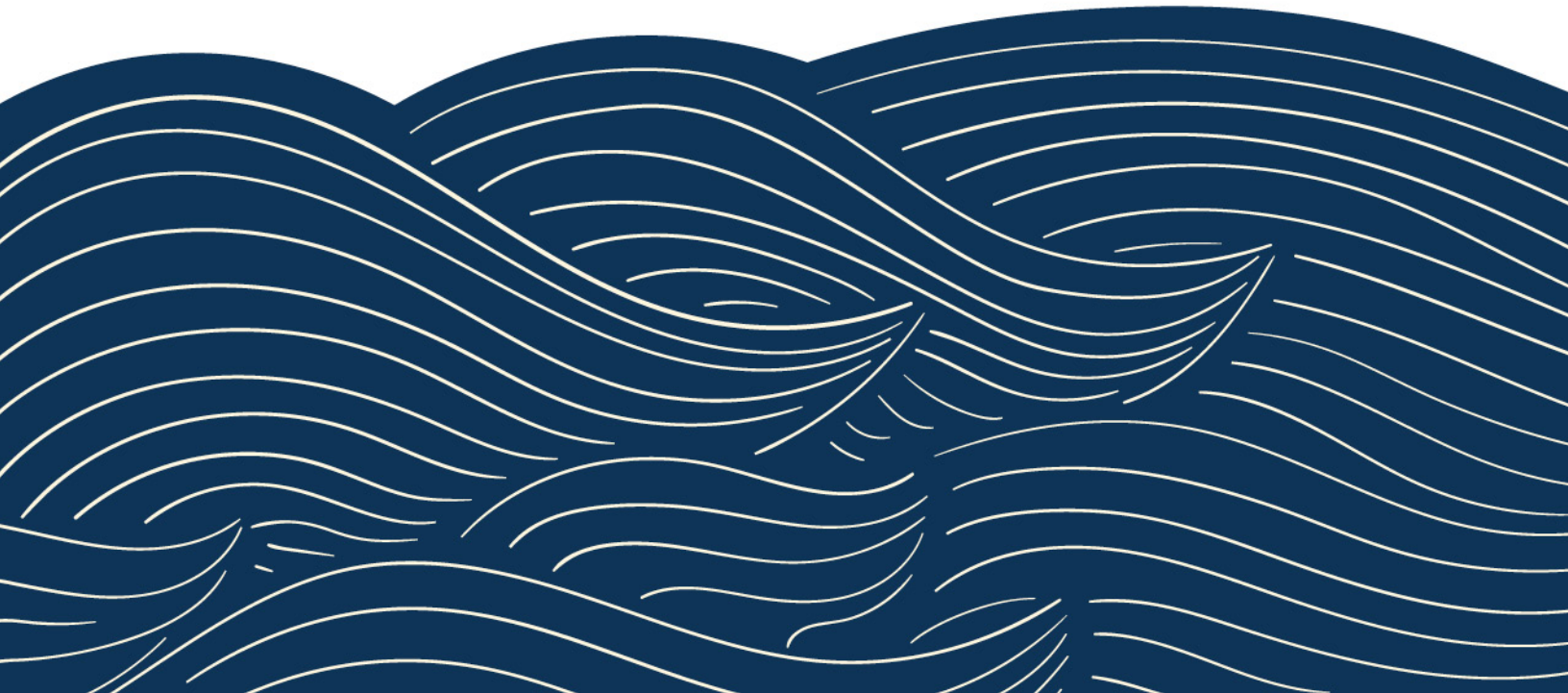
STATE WATER RESOURCES CONTROL BOARD

Roger Johnson

Chief, Division of Water Rights

WR 14-2 (6-94)

City Water Conservation Municipal Code



13.04.345 Mandatory water conservation requirements.

A. Normal Water Supply Conditions.

1. Outdoor water use for washing vehicles, boats, paved surfaces, buildings or other similar uses shall be attended and have hand-controlled water devices, typically including spring-loaded shutoff nozzles.

2. Outdoor irrigation resulting in excessive gutter runoff is prohibited.

3. Marinas and waterfront installations: all hoses shall have spring-loaded shutoff nozzles or similar controlling devices.

4. Restaurants shall serve drinking water only in response to a specific request by the customer.

5. Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection A2 of this section; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive without excessive gutter runoff. All other conservation measures remain applicable during the temporary exemption.

B. Moderately Restricted Water Supply Conditions.

1. Use of water which results in excessive gutter runoff is prohibited.

2. Outdoor water use for washing vehicles, boats, buildings or other similar uses shall be attended and have hand-controlled water devices, typically including spring-loaded shutoff nozzles.

3. No water shall be used for cleaning driveways, patios parking lots, sidewalks, streets, or other such uses except where necessary to protect the public health or safety.

4. Outdoor Irrigation.

   a. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.

   b. All consumers are directed to use no more water than necessary to maintain landscaping.

5. Marinas and WaterfrontInstallations.

   a. Use of fresh water to wash down boats, docks, or other incidental activities shall be attended and have hand-controlled devices, typically including spring-loaded shutoff nozzles.

   b. All hoses shall have spring-loaded shutoff nozzles or similar controlling devices.

6. Restaurants shall serve drinking water only in response to a specific request by a customer.

7. Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection B1 of this section; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive without excessive gutter runoff. All other conservation measures remain applicable during the temporary exemption.

C. Severely Restricted Water Supply Conditions.

1. Outdoor Water Use (Except Irrigation).

   a. Use of water which results in excessive gutter runoff is prohibited.

   b. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets, or other such uses except where necessary to protect the public health or safety.

c. Washing cars by use of a hose is prohibited. Use of a bucket is permitted subject to nonwasteful applications.

2. Outdoor Irrigation.

a. Outdoor irrigation is prohibited between the hours of ten a.m. and four p.m.

b. Irrigation of private and public landscaping, turf areas, and gardens is permitted at even-numbered addresses only on Wednesdays and Sundays, and at odd-numbered addresses only on Tuesdays and Saturdays. All consumers are directed to use no more water than necessary to maintain landscaping.

c. Newly planted landscaping or newly seeded lawns installed prior to the date these mandatory conservation requirements are imposed may be temporarily exempted from the provisions of subsection (C)(2)(b) of this section; provided, the owner/tenant establishes documentation satisfactory to the city conclusively proving the planting date. Any temporary exemption shall expire when the planting is sufficiently established to survive with twice per week watering. All other conservation measures remain applicable during the temporary exemption.

3. Marinas and Waterfront Installations.

a. Use of fresh water to wash down boats, docks, or other incidental activities is prohibited.

b. All hoses shall have spring-loaded shutoff nozzles or similar controlling devices.

4. Restaurants shall serve water only in response to a specific request by a customer.

5. Emptying and refilling of swimming pools and commercial spas is prohibited except to prevent structural damage and/or to comply with public health regulations.

6. Use of potable water for compaction or dust control purposes in construction activities is prohibited.

7. Any dysfunctional water fixtures in public or commercial facilities shall be repaired within three days of receipt of notification by the city.

8. All visitor-serving facilities in the city shall prominently display these mandatory water conservation requirements for the benefit and education of visitors to the community. Such display shall be done in a permanent vandal-resistant manner. Visitor-serving facilities shall include, but not be limited to, all motels, restaurants, campgrounds, recreational vehicle parks, mobilehome parks, service stations, public restrooms, etc. The owners or managers of such facilities shall distribute to all customers a printed handout or flyer describing these mandatory water conservation requirements. Such handouts or flyers shall be provided to the owners or managers of such facilities by the city free of charge.

D. Critical Water Supply Conditions.

1. Outdoor Water Use (Except Irrigation).

a. Use of water which results in gutter runoff is prohibited.

b. No water shall be used for cleaning driveways, patios, parking lots, sidewalks, streets or other such uses, except where necessary to protect the public health or safety, and then only by use of a bucket of water and brush.

c. Washing cars or other mobile vehicles and equipment, including trailers and boats on trailers, is permitted only by the use of a bucket of water. No use of hoses, even if equipped with a shut-off nozzle, is permitted. Commercial car washes are exempt from these provisions.

d. Use of potable water to wash buildings, houses or mobilehomes is prohibited.

2. Outdoor Irrigation.

a. Outdoor irrigation is prohibited between the hours of nine a.m. and five p.m.

b. Irrigation of landscaping and gardens is permitted at even-numbered addresses only on Wednesdays, and at odd-numbered addresses only on Tuesdays. Noncommercial food-crop gardens are exempt from these restrictions.

3. Marinas and Waterfront Installations.

a. Use of fresh water to wash down boats or docks, or for other incidental activities, is prohibited.

b. All hoses shall have spring-loaded shutoffs or similar devices, and may be used only to fill water tanks of boats or to flush outboard engines.

4. Restaurants shall serve water only in response to a specific request by a customer.

5. Emptying and refilling swimming pools and spas is prohibited except to prevent structural damage and/or to comply with public health regulations.

6. Use of potable water for compaction or dust-control purposes in construction activities is prohibited.

7. Any dysfunctional water fixtures in public commercial facilities shall be repaired immediately.

8. All visitor-serving facilities in the city shall prominently display these mandatory water conservation requirements for the benefit and education of visitors to the community. Such display shall be done in a permanent, vandal-resistant manner. Visitor-serving facilities shall include, but not be limited to, all motels, restaurants, campgrounds, recreational vehicle parks, mobilehome parks, service stations, public restrooms, etc. The owners or managers of such facilities shall distribute to all customers a printed handout or flyer describing these mandatory water conservation requirements. Such handouts or flyers shall be provided to the owners or managers of such facilities by the city free of charge.

E. Emergency Water Supply Conditions. The city council may impose water rationing requirements as it deems appropriate in accordance with Sections 13.04.330 and 13.04.340.

(Ord. 417 § 2, 1992; Ord. 381, 1990; Ord. 374 §§ 2 — 4, 1990; Ord. 347 § 3, 1989)

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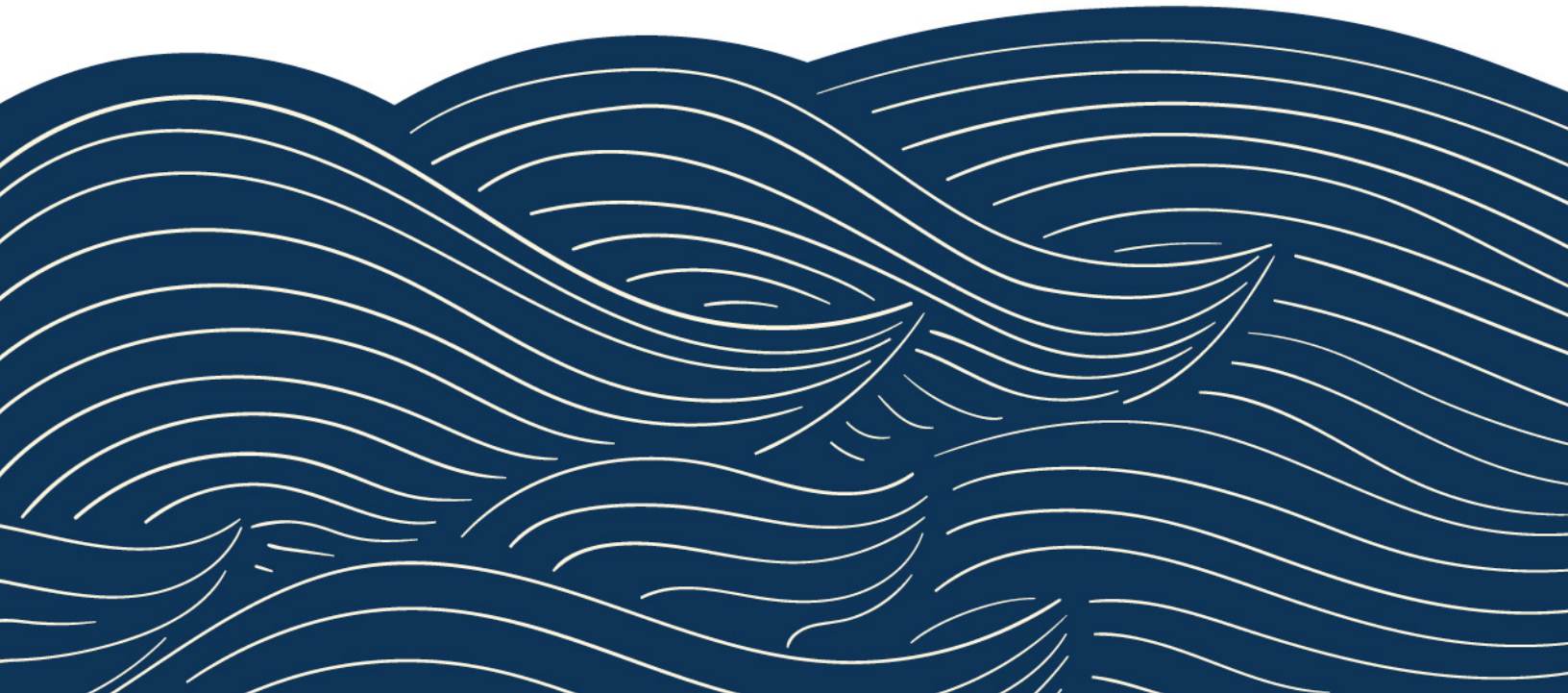
San Luis Obispo Country Multi-Jurisdictional Hazard Mitigation Plan



Omitted from Final to reduce file size and total pages. A copy of the San Luis Obispo County Multi-Jursdictional Hazard Mitigation Plan (October 2019) can be found by following the link below:

https://www.slocounty.ca.gov/Departments/Planning-Building/Forms-Documents/Plans-and-Elements/Elements/Local-Hazard-Mitigation-Plan/San-Luis-Obispo-County-Multi-Jurisdictional-Hazard.pdf

CITY OF MORRO BAY

INCORPORATED JULY 17, 1964