


PARAMOUNT
THE CITY
Safe, Healthy, and Attractive

2020 Urban Water Management Plan

Prepared By:
Risk Management Professionals
8717 Research Drive, Suite 150, Irvine, California 92618
949/282-0123 www.RMPCorp.com

RMP

1 INTRODUCTION & OVERVIEW

1.1 INTRODUCTION

The California State Legislature passed AB 797, the Urban Water Management Planning Act (Act) of 1983, which became effective January 1, 1984. The Act requires every urban water supplier providing water for municipal purposes to more than 3,000 customers, or supplying more than 3,000 acre-feet of water annually, to prepare and adopt an Urban Water Management Plan (UWMP). The act also requires urban water suppliers to update the UWMP in years ending in five and zero using a 20 to 25 year planning horizon. The City of Paramount ("City"), a retail water supplier, fits the defined criteria and has prepared this UWMP addressing the requirements set forth in the State of California Water Code Sections 10610 through 10657.

Since its passage, many amendments have been added to the Act. These changes are intended to encourage increased regional planning and the cooperative management of California's most precious commodity - water. As a result, UWMPs have evolved to become:

- Foundation documents and sources of information for Water Supply Assessments and Written Verification of Water Supply,
- Long range planning documents for water supply,
- Source data for the development of regional water plans,
- Source documents for cities and counties preparing their General Plans, and
- Key components of Integrated Regional Water Management Plans.

For the City, the benefits of updating the UWMP extend beyond legislative compliance. This document is a reference intended to complement other UWMPs by analyzing conservation issues and the water supply available to the City. An effective UWMP aimed at developing a greater level of water conservation, awareness, and reliability requires the coordinated efforts on key tasks by the Department of Water Resources (DWR), Central Basin Municipal Water Department (CBMWD) and its member agencies, the Metropolitan Water District (MWD), the County of Los Angeles, as well as the residents of the City of Paramount. This document also summarizes the current and proposed water management activities performed by the City to provide dependable,

adequate and safe water. The UWMP further identifies proposed projects with a description of resulting water costs, benefits, and implementation schedule.

Specifically, the goals of this plan are:

- To provide a local perspective on current and proposed water conservation programs,
- To review current conservation programs and efforts,
- To evaluate potential conservation methods and identify improvements, as appropriate to the City programs,
- To provide a general framework for the development of mechanisms for coping with both short-term and long-term deficiencies in regional and/or local water supplies, and
- To serve as a flexible plan that can be updated periodically to reflect changes in regional and local trends, conditions and conservation policies (at least once every five years in accordance with Section 10621 and 10644 of AB 797).

In compliance with the State mandate and accordance with the best practices of water management, the City has prepared this UWMP.

1.2 REGULATORY CHANGES

The California Water Code changes since 2015 are summarized below, and details of the changes can be found in the UWMP Guidebook 2020. See Figure 1.2.1 below for a matrix of changes.

- Service Area Socioeconomic Factors CWC Section 10631 (a) and (b)(1) Assembly Bill 1414, Urban Water Management Plans Guidebook 2020, Chapter 3
- Land Use Authority Coordination CWC Section 10631 (a) Assembly Bill 1414, Urban Water Management Plans Guidebook 2020, Chapter 4
- Lay Description CWC Section 10630.5 Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 4
- Quantified Distribution Losses CWC Section 10631 (d) (3) (A) and (C) Assembly Bill 1414, Urban Water Management Plans Guidebook 2020, Chapter 4
- Drought Risk Assessment CWC Section 10635 (b) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 4
- Annual Water Supply and Demand Assessment CWC Section 10632.1 Assembly Bill 1414, Urban Water Management Plans Guidebook 2020, Chapter 4

- Application of DRA and WSCP CWC Section 10631 (b) Assembly Bill 1414, Urban Water Management Plans Guidebook 2020, Chapter 6
- Water Service Reliability CWC Section 10635 (a) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 7
- Key Attributes of Water Supply Reliability CWC Section 10632 (a) (1) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Standard Water Shortage Levels CWC Section 10632 (a) (3) (A) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Shortage Response Actions CWC Section 10632 (a) (4) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Annual Water Supply and Demand Assessment Procedures CWC Section 10632 (a) (2) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Communication Protocols CWC Section 10632 (a) (5) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Monitoring and Reporting Criteria CWC Section 10632 (a) (9) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8
- Reevaluation and improvement Process CWC Section 10632 (a) (10) Senate Bill 606, Urban Water Management Plans Guidebook 2020, Chapter 8

Figure 1.2.1 – Table of Changes Since 2015[1]

Change Number	Topic	CWC Section	Legislative Bill	Summary	Guidebook Section
1	System Description	10631(a), 10631(b)(1)	AB 1414	Requires the inclusion of service area socioeconomic information as part of the system description. Some factors may include income and poverty levels, amount of unemployment, major languages spoken or cultural clusters, educational levels, general Health status an age distribution of population served, economic viability and types of non-residential uses, redevelopment and special tax districts, types and proportions of housing, age of buildings, etc.	Chapter 3
2	Water Use Characterization	10631(a)	AB 1414	Suppliers shall coordinate with local or regional land use authorities to determine the most appropriate land uses information for projecting water use in five-year increments, up to the year 2045. The following link can be used for industrial sectors (NAICS): http://www.census.gov/cgi-bin/sssd/naics/naicsrch. The following link can be used for agricultural industrial process water: http://www.census.gov/cgi-bin/sssd/naics/naicsrch.	Chapter 4
3	Water Use Characterization	10630.5	SB 606	Suppliers shall provide a simple lay description of their projected water use for the foreseeable future	Chapter 4
4	Water Use Characterization	10631(d)(3)(A), 10631(d)(3)(C)	AB 1414	Suppliers shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met	Chapter 4

5	Water Use Characterization	10635(b)	SB 606	Both Wholesale and Retail Suppliers shall include a DRA for a drought period that lasts five consecutive water years, starting from the year following the assessment, which would be 2021 for this round of UWMPs. The DRA requires a comparison of water supplies with total projected water use. Therefore, the Supplier must produce a projected water use for the years 2021 through 2025 as part of the water use projections, up to the year 2040.	Chapter 4
6	Water Use Characterization	10632.1	AB 1414	Both Wholesale and Retail Suppliers will have to conduct an annual water supply and demand assessment on or before July 1 of each year, starting in 2022. The annual assessment will include current year unconstrained demand. Suppliers are encouraged to consider unconstrained demand as the expected water use in the upcoming year, based on recent water use, and before any projected response actions a Supplier may trigger under its Water Shortage Contingency Plan.	Chapter 4
7	Water Supply Characterization	10631(b)	AB 1414	The new requirements for a water supply analysis are largely in the application of that analysis to the new Drought Risk Assessment (DRA), Water Shortage Contingency Plan (WSCP), and consideration of climate change in future projections. In this section, the conclusions drawn from the water supply characterization integrate into a specific understanding of a Supplier's new drought risk in the DRA and inform the management and mitigation actions a Supplier must address in the newly required WSCP, along with consideration of climate change and coordination with land use and planning authorities for future projections. For example, an analysis that concludes that a water supply portfolio is reliable under all conditions conceivable may have fewer supply augmentation actions or demand management actions in a WSCP. In this way, the water supply analysis conclusions translate into a realistic DRA and implementable actions listed in the WSCP in the event of water shortage conditions. Guidance is provided in Appendix I	Chapter 6

8	Water Service Reliability and Drought Risk Assessment	10635(a)	SB 606	The new UWMP requirements is manifest in the application of new criteria to the Water Use Analysis in Chapter 4, the Water Supply Analysis in Chapter 6, and the resulting water service reliability assessment in this chapter—including the requirement for a five-consecutive dry years analysis compared to the 2015 UWMPs, which included only a three-year analysis. A new DRA is now also required under California Water Code (Water Code) Section 10635, and it must be prepared as a component of the 2020 UWMP. The DRA requires a methodical assessment of water supplies and water uses under an assumed drought period that last five consecutive years. The newly required WSCP is described in Chapter 8. Supply capacity under several scenarios is available in the latest SWP Delivery Capability Report available at: https://water.ca.gov/Library/Modeling-and-Analysis/Central-Valley-models-and-tools/CalSim-2. Weather information is available at: • The National Weather Service Website: https://www.weather.gov/ • California Irrigation Management Information System: https://cimis.water.ca.gov/ Western Regional Climate Center: https://wrcc.dri.edu/ • Western Regional Climate Center: https://wrcc.dri.edu/ Runoff data is available at: • DWR (cdec) https://cdec.water.ca.gov/ • U.S. Geological Survey: https://maps.waterdata.usgs.gov/mapper/?state=ca • Operators of local dams and reservoirs Groundwater information is available at: • Local Groundwater Sustainability Agency • State of California Sustainable Groundwater Management Website: https://water.ca.gov/Programs/Groundwater-Management	Chapter 7

				• California Statewide Groundwater Elevation Monitoring (CASGEM): https://water.ca.gov/Programs/Groundwater-Management/Groundwater-Elevation-Monitoring--CASGEM	
9	Water Shortage Contingency Plan	10632(a)(1)	SB 606	A Supplier's WSCP must include key attributes of its water supply reliability analysis conducted pursuant to Water Code Section 10635.	Chapter 8
10	Water Shortage Contingency Plan	10632(a)(3)(A)	SB 606	A Supplier's WSCP must include six standard water shortage levels corresponding to progressive ranges of up to 10-, 20-, 30-, 40-, and 50-percent shortages and greater than 50-percent shortage.	Chapter 8
11	Water Shortage Contingency Plan	10632(a)(4)	SB 606	A Supplier's WSCP must include locally appropriate "shortage response actions" for each shortage level, with a corresponding estimate of the extent the action will address the gap between supplies and demands.	Chapter 8
12	Water Shortage Contingency Plan	10632(a)(2)	SB 606	A Supplier's WSCP must include procedures for conducting an annual water supply and demand assessment with prescribed elements. Under Water Code Section 10632.1, urban water Suppliers are required to submit, by July 1 of each year, beginning in the year following adoption of the 2020 UWMP, an annual water shortage assessment report to the California Department of Water Resources (DWR).	Chapter 8
13	Water Shortage Contingency Plan	10632(a)(5)	SB 606	A Supplier's WSCP must include communication protocols and procedures to inform customers, the public, and government entities of any current or predicted water shortages and associated response actions.	Chapter 8
14	Water Shortage Contingency Plan	10632(a)(9)	SB 606	A Supplier's WSCP must include monitoring and reporting procedures to assure appropriate data is collected to monitor customer compliance and to respond to any state reporting requirements.	Chapter 8
15	Water Shortage Contingency Plan	10632(a)(10)	SB 606	A Supplier's WSCP must include a reevaluation and improvement process to assess the functionality of its WSCP and to make appropriate adjustments as may be warranted.	Chapter 8

Source: 2020 Urban Water Management Plan Guidebook 2020

1.3 PLAN ORGANIZATION

The chapters in this UWMP have been organized to correspond to the outline of the California Department of Water Resources' "2020 Urban Water Management Plans Guidebook for Urban Water Suppliers". Additionally, the sequence used to present the information may be different from that shown in the Act in order to present the material in a manner reflecting the unique conditions within the City's service area. This UWMP is organized according to the following chapters:

1 **INTRODUCTION & OVERVIEW**

Chapter 1 describes organization of the 2015 UWMP, discussion on the importance and extent of the City's water management planning efforts.

2 **PLAN PREPARATION**

Chapter 2 describes the City's process of developing the UWMP, including stakeholder involvement and the coordination with key stakeholders.

3 **SYSTEM DESCRIPTION**

Chapter 3 describes the City service area, including the climate and demographics, and also provides an overview of the water system facilities.

4 **SYSTEM WATER USE**

Chapter 4 documents historical and projected water use including use by sector within the City's service area.

5 **SB 7X-7 BASELINE AND TARGETS**

Chapter 5 outlines the baseline and target per capita water use reduction values, demand projection calculations and the method used to develop these projections. This chapter also demonstrates whether or not the City has achieved the 2020 water use target.

6 **SYSTEM SUPPLIES**

Chapter 6 outlines the sources of water within the City service area, including documentation regarding wholesale water, groundwater, recycled water, desalination, and transfer and exchange opportunities.

WATER SUPPLY RELIABILITY

7 Chapter 7 outlines the reliability of their water supply and project reliability out 20 years. This includes documentation of the three dry year scenarios.

WATER SHORTAGE CONTINGENCY PLANNING

8 Chapter 8 outlines the City's Water Shortage Contingency Plan, mandatory prohibitions, penalties or charges for excessive use, revenue and expenditure impacts, and mechanisms to determine reductions in water use.

DEMAND MANAGEMENT MEASURES

9 Chapter 9 describes the water conservation programs implemented by the City in an effort to reduce water usage in its service area.

PLAN ADOPTION

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

1.4 COORDINATION

Urban Water Management Planning Act Requirement:

CWC 10608.56

(a) On and after July 1, 2016, an urban retail water supplier is not eligible for a water grant or loan awarded or administered by the state unless the supplier complies with this part.

(c) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval a schedule, financing plan, and budget, to be included in the grant or loan agreement, for achieving the per capita reductions. The supplier may request grant or loan funds to achieve the per capita reductions to the extent the request is consistent with the eligibility requirements applicable to the water funds.

(e) Notwithstanding subdivision (a), the department shall determine that an urban retail water supplier is eligible for a water grant or loan even though the supplier has not met the per capita reductions required pursuant to Section 10608.24, if the urban retail water supplier has submitted to the department for approval documentation demonstrating that its entire service area qualifies as a disadvantaged community.

(f) The department shall not deny eligibility to an urban retail water supplier or agricultural water supplier in compliance with the requirements of this part and Part 2.8 (commencing with Section 10800), that is participating in a multiagency water project, or an integrated regional water management plan, developed pursuant to Section 75026 of the Public Resources Code, solely on the basis that one or more of the agencies participating in the project or plan is not implementing all of the requirements of this part or Part 2.8 (commencing with Section 10800).

The City ensured that the 2020 UWMP is completed and submitted in accordance with CWC 10608.56 sections a, c, e and f to ensure that the City is eligible for any water management grant, loan, or other State funding. The City has maintained its latest UWMP on file at the City's offices in Paramount, California.

2 PLAN PREPARATION

2.1 Basis for Preparing a Plan

Urban Water Management Planning Act Requirement:

CWC 10617 "Urban water supplier" means a supplier, either publicly or privately owned, providing water for municipal purposes either directly or indirectly to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually. An urban water supplier includes a supplier or contractor for water, regardless of the basis of right, which distributes or sells for ultimate resale to customers. This part applies only to water supplied from public water systems…

CWC 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.

CWC 10621(a) Each urban water supplier shall update its plan at least once every five years on or before December 31, in years ending in five and zero, except as provided in subdivision (d).

(d) Each urban water supplier shall update and submit its 2015 plan to the department by July 1, 2016.

The City of Paramount (City) is required to prepare an Urban Water Management Plan (UWMP) since it supplies an average of ~6,300 acre-feet per year within its service area.

Public Water Systems

Urban Water Management Planning Act Requirement:

CWC 10644(a)(2) The plan, or amendments to the plan, submitted to the department … shall include any standardized forms, tables, or displays specified by the department.

CWC 10608.52(a) The department, in consultation with the board, the California Bay-Delta Authority or its successor agency, the State Department of Public Health, and the Public Utilities Commission, shall develop a single standardized water use reporting form to meet the water use information needs of each agency, including the needs of urban water suppliers that elect to determine and report progress toward achieving targets on a regional basis as provided in subdivision (a) of Section 10608.28.

(b) At a minimum, the form shall be developed to accommodate information sufficient to assess an urban water supplier's compliance with conservation targets pursuant to Section 10608.24… The form shall accommodate reporting by urban water suppliers on an individual or regional basis as provided in subdivision (a) of Section 10608.28.

California Health and Safety Code 116275

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

The City's 2015 UWMP utilized the Department of Water Resources standardized forms, tables, or displays. This use of these forms, tables or displays is continued throughout the 2020 UWMP.

The City uses a public water system and this is required to complete the UWMP as well as submit to the DWR. Table 2.1.1 shows the City's Public Water System (PWS) information. The City will be submitting required information through the Water Use Efficiency Online Tool, as required for the 2020 UWMP.

Table 2.1.1 Retail Only: Public Water Systems			
Public Water System Number	Public Water System Name	Number of Municipal Connections 2020	Volume of Water Supplied 2020 (acre-feet)
CA1910105	City of Paramount – Public Works	7378	5522
	TOTAL	7378	5522

Agencies Serving Multiple Service Areas/Public Water Systems

The City only serves within its service area and therefore this subsection is not applicable.

2.2 Regional Planning

The City will not be participating in a regional 2020 UWMP. Please see next section.

2.3 Individual or Regional Planning and Compliance

As stated in section 2.2, the City will not be participating in a regional 2020 UWMP; however, the City has developed stand-alone UWMPs since 2005 and will do so for the 2020 update. The goal of this UWMP is to address all the requirements of the California Water Code. As part of this effort, the agency notified and coordinated with the Central Basin Municipal Water District (CBMWD), County of Los Angeles, Metropolitan Water District, and the Long Beach Water Department.

Table 2.3.1 Plan Identification		
☒	Individual UWMP	
☐	Regional UWMP (RUWMP)	
	Choose One:	
	☐	RUWMP includes a Regional Alliance
	☐	RUWMP does not include a Regional Alliance
NOTES: This is DWR Standardized Table 2-2.		

2.4 Fiscal or Calendar Year and Units of Measure

Urban Water Management Planning Act Requirement:

CWC 10608.20 (a) (1) Urban retail water suppliers… may determine targets on a full fiscal year or calendar year basis..

Fiscal or Calendar Year

The City uses Fiscal Years for it's database. Information regarding Agency type, year basis and unit of measure used is presented on Table 2.4.1 below.

Table 2.4.1
Agency Identification

Type of Agency (select one or both)	
☐	Agency is a wholesaler
☒	Agency is a retailer
Fiscal or Calendar Year (select one)	
☐	UWMP Tables Are in Calendar Years
☒	UWMP Tables Are in Fiscal Years
If Using Fiscal Years	Provide Month and Day that the Fiscal Year Begins
Day	*1-Jul*
Units of Measure Used in UWMP (select one)	
☒	Acre Feet (AF)
☐	Million Gallons (MG)
☐	Hundred Cubic Feet (CCF)

NOTES: This is DWR Standardized Table 2-3.

2.5 Coordination and Outreach

Urban Water Management Planning Act Requirement:

CWC 10631(j) An urban water supplier that relies upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. The wholesale agency shall provide information to the urban water supplier for inclusion in the urban water supplier's plan that identifies and quantifies, to the extent practicable, the existing and planned sources of water as required by subdivision (b), available from the wholesale agency to the urban water supplier over the same five-year increments, and during various water-year types in accordance with subdivision (c). An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

Wholesale and Retail Coordination

The Central Basin Municipal Water District supplies ~4% of the City's water.

Table 2.5.1 Retail: Water Supplier Information Exchange

The retail supplier has informed the following wholesale supplier(s) of projected water use in accordance with CWC 10631.
Wholesale Water Supplier Name *(Add additional rows as needed)*
Central Basin Municipal Water District
NOTES: This is DWR Standardized Table 2-4

Coordination with Other Agencies and the Community

Urban Water Management Planning Act Requirement:

CWC 10620(d)(2) Each urban water supplier shall coordinate the preparation of its plan with other appropriate agencies in the area, including other water suppliers that share a common source, water management agencies, and relevant public agencies, to the extent practicable.

The City ensured the preparation of the 2020 Urban Water Management Plan was coordinated with the appropriate water and public agencies. The Central Basin Municipal Water District, County of Los Angeles, the Metropolitan Water District, and the City of Long Beach were encouraged to participate in the Plan development.

Urban Water Management Planning Act Requirement:

CWC 10642 Each urban water supplier shall encourage the active involvement of diverse social, cultural, and economic elements of the population within the service area prior to and during the preparation of the plan.

The City realizes the importance different social, cultural, and economic elements within its service area can have on the quality and success of its plan and water conservation efforts. The City encouraged all members of the public to attend the public hearing, and the City solicited written input from the public. Additionally, the City advertised, and provided a draft version of the plan on its website to allow public review and comment.

Notice to Cities and Counties

Urban Water Management Planning Act Requirement:

CWC 10621(b) Every urban water supplier required to prepare a plan pursuant to this part shall, at least 60 days prior to the public hearing on the plan required by Section 10642, notify any city or county within which the supplier provides water supplies that the urban water supplier will be reviewing the plan and considering amendments or changes to the plan. The urban water supplier may consult with, and obtain comments from, any city or county that receives notice pursuant to this subdivision.

The City sent notification letters to the following agencies approximately 60 days prior to the public hearing:

- County of Los Angeles
- Central Basin Municipal Water District

A copy of the letter is available in Appendix A, as well as the distribution addresses.

3 SYSTEM DESCRIPTION

3.1 SERVICE AREA PHYSICAL DESCRIPTION

Urban Water Management Planning Act Requirement:

CWC 10631(a) Describe the service area of the supplier.

General Location Overview

The City of Paramount (City) is located in the southeastern portion of Los Angeles County, between the Los Angeles and San Gabriel Rivers. It is 12 miles north of the Ports of Los Angeles and Long Beach and 15 miles south of downtown Los Angeles. It occupies an area of approximately 4.8 square miles (2,800 acres). The predominant land use in the City is residential, with land also dedicated to commercial, industrial, municipal, parks and recreation, school, and hospital uses. Figure 3.1.1 shows the City in a regional context.

Water System Overview

The City has three water sources: groundwater, imported water (surface), and recycled water. The City also has emergency mutual-aid domestic water connections with the City of Long Beach, the City of Downey, and Golden State Water Company. Currently, two water utilities serve the community: Golden State Water Company and the City's Water Department. The City's water department services the majority of the population. Two northern portions of the City, above the I-105 Freeway, are serviced by Southern California Water Company. The City boundaries, as shown in Figure 3.1.2 provides an estimate of the service area of the City.

The City provides potable water service to its residential, commercial, industrial, and institutional customers within the City limits. The City's current water system that includes three wells; two imported water connections; approximately 130 miles of water transmission and distribution mains; and appurtenant valves, hydrants, and equipment. Currently, the City does not have any storage reservoirs, although the groundwater basin acts as ground storage for the City.

The City overlies the Central Groundwater Basin (Central Basin). Upon the Central Basin's adjudication in 1965, the City was allocated an annual pumping right, which currently stands at

5,883 acre-feet per year plus 20% carryover rights. Well No. 13, Well No. 14, and Well No. 15 are the City's three existing groundwater wells as of 2020. However, by the end of 2021, the City is projected to have well No. 13 decommissioned and a new well, No. 16, put into service. Table 3.1.1 provides a description of the City wells.

Table 3.1.1
Well Operating Capacities

Basin Name	Gallons Per Day
City of Paramount Well 13	2,160,000
City of Paramount Well 14	4,608,000
City of Paramount Well 15	3,600,000
City of Paramount Well 16	Under Construction
Total	**10,368,000**

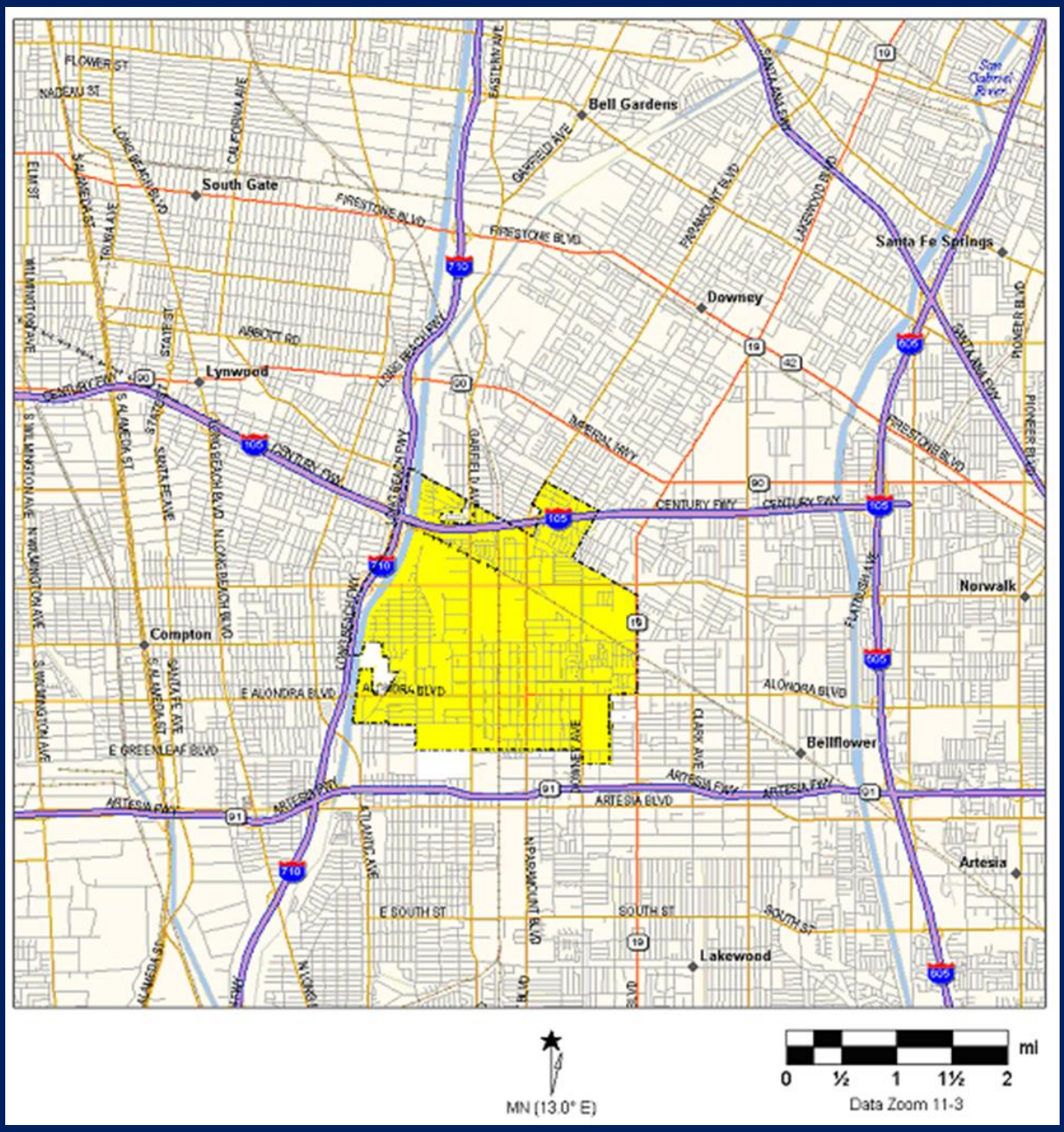


Figure 3.1.1 – City Regional Location[1]

[1]Not to Scale

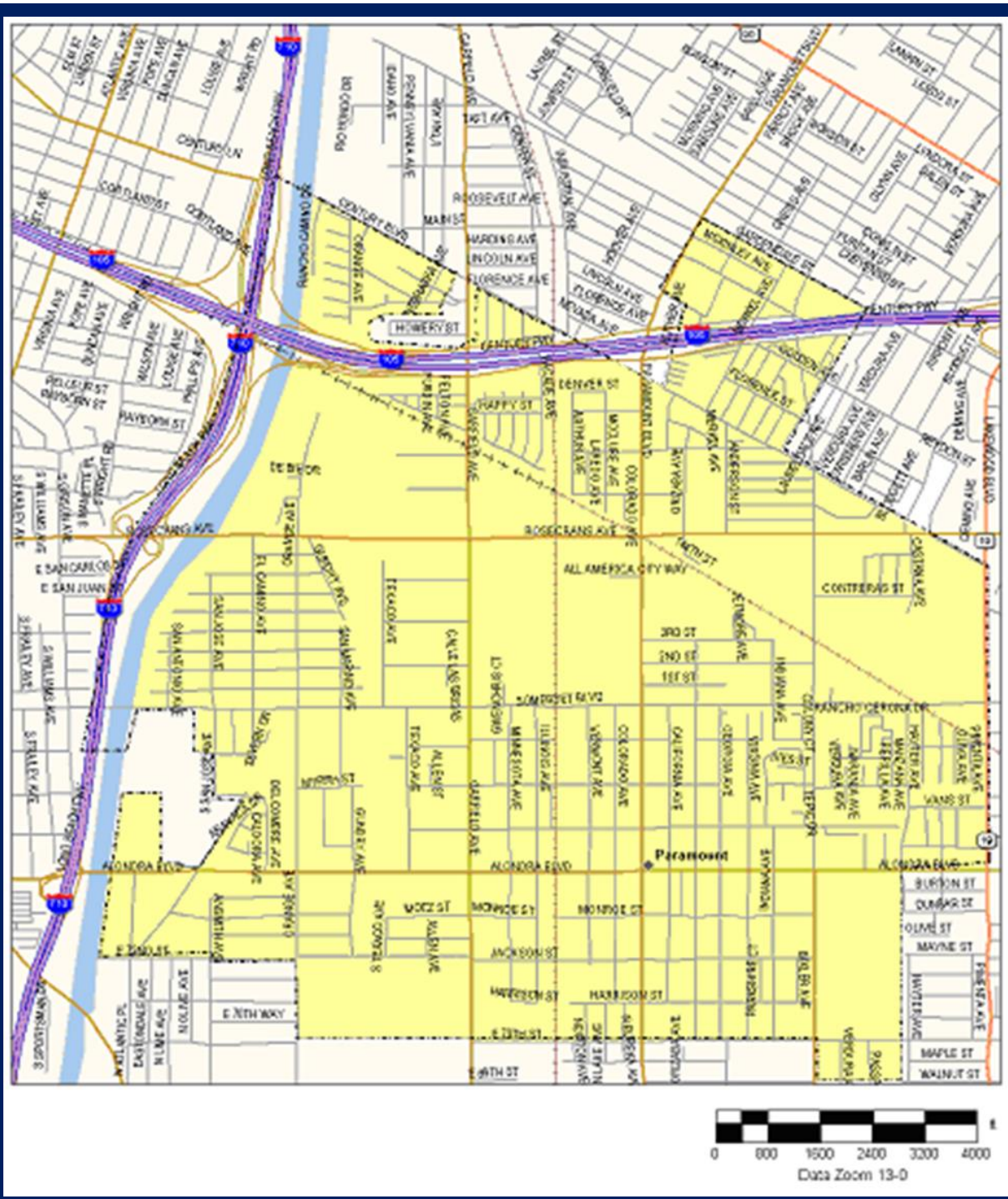


Figure 3.1.2 – The City Corporate Boundaries/Service Area[1]

[1]Not to Scale

3.2 SERVICE AREA CLIMATE

Urban Water Management Planning Act Requirement:

CWC 10631(a) Describe the service area of the supplier, including…climate…

Temperature

The City's semi-arid climate is temperate year-round, with mild and dry summers and wet cool winters. The temperature range is generally moderate as depicted in Figure 3.2.1; the average high temperature is 76.5 °F and the average minimum annual temperature is 55.5 °F.

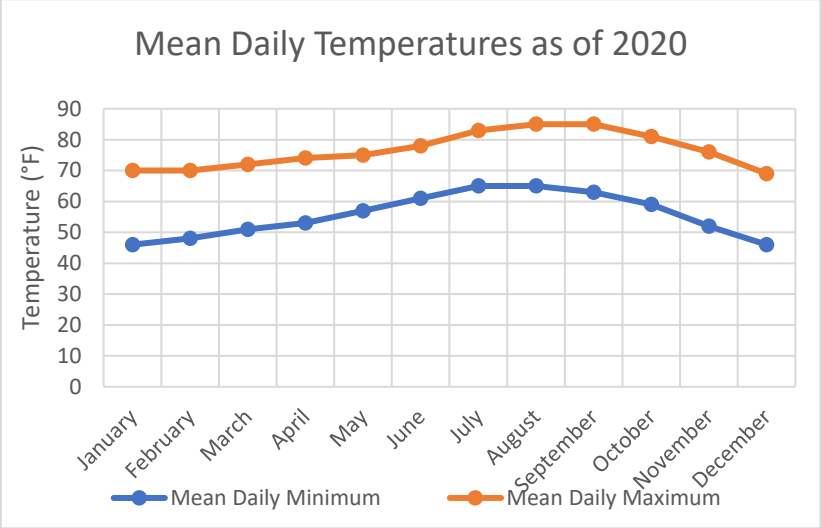


Figure 3.2.1 – Average Temperatures

Precipitation

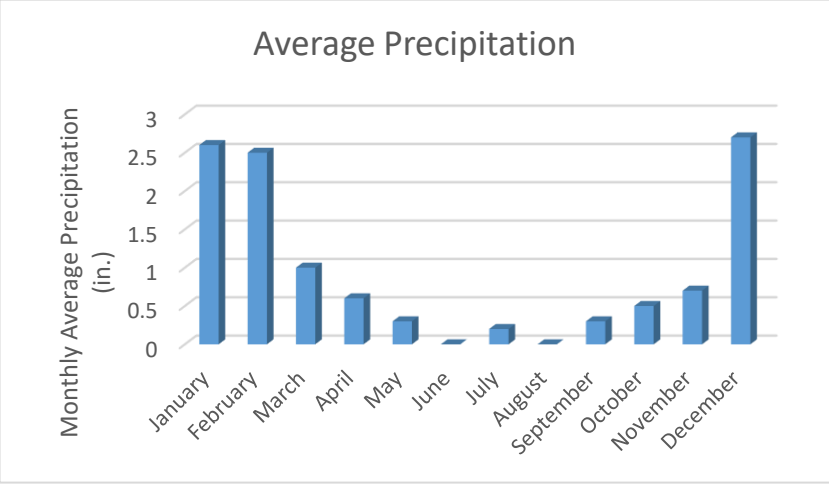


Figure 3.2.2 – Average Precipitation

The City's annual average precipitation is 11.46 inches. The average annual monthly precipitation in the City is presented in Figure 3.2.2.

Additionally, seasonal variation in temperature, rainfall, and evapotranspiration (ETo) rate are illustrated in Table 3.2.1.

Table 3.2.1
Climate Data [1]

	Avg. High Temp. (°F)	Avg. Low Temp. (°F)	Avg. Precipitation (in)	Avg. ETo [2] (in)
January	68.6	49.1	2.78	1.86
February	69.1	49.7	2.56	2.24
March	72.1	53.3	1.65	3.41
April	75.0	56.0	0.66	4.50
May	71.7	58.1	0.21	5.27
June	77.8	62.4	0.05	5.70
July	83.8	67.4	0.02	5.89
August	85.0	67.8	0.05	5.58
September	83.7	66.4	0.16	4.50
October	81.7	62.3	0.35	3.41
November	75.0	53.6	1.17	2.40
December	68.4	47.7	1.80	1.86

Source: (1) National Center for Environmental Information: https://www.ncdc.noaa.gov/IPS/lcd
(2) CIMIS : http://wwwcimis.water.ca.gov – Reference Evapo transpiration (ETo) Zones Map

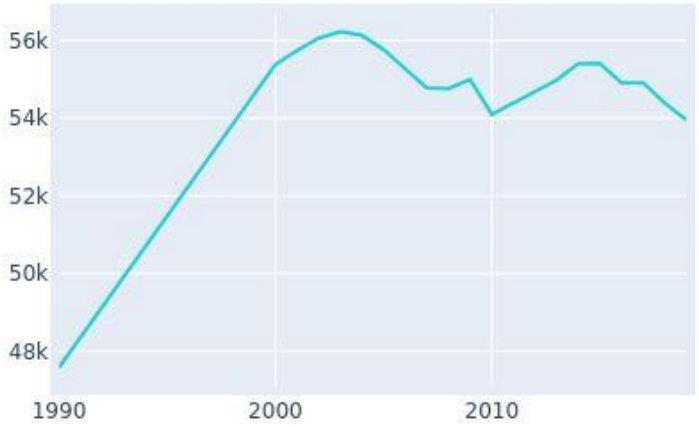
3.3 SERVICE AREA POPULATION

Urban Water Management Planning Act Requirement:

CWC Section 10631 Describe the service area of the supplier, including current and projected population …The projected population estimates shall be based upon data from the state, regional, or local service agency population projections within the service area of the urban water supplier and shall be in five-year increments to 20 years or as far as data is available.

The area was first founded in 1886 when the California Cooperative Colony Tract Company subdivided the land and sold off tracts in what was then known as the town of Clearwater, named after the adjacent lake. This area was then used for farming and dairy uses, the latter of which was spurned on by the influx of dairymen from the Netherlands and Portugal in the 1920s. During this time, water was obtained through various sources, which included the Los Angeles River, Clearwater Lake, and through groundwater.

Figure 3.3.1 – Population History



By the late 1920s, the Signal Hill oil boom brought on the development of several refineries in the area and several subsequent housing tracts, causing the City to triple in size within five years. In addition, the construction of the Los Angeles Terminal Railroad through the City and heavy industries, which are located adjacent to it, continued on the urbanization of the City. The City has approximately 14,600 dwelling units and there is an average of 4 persons per household.

The City was incorporated in 1957 and population growth increased at a high annual rate of 2.46% between 1960 and 1970 but tailed off to 0.47% between 1970 and 1980. The population took off between 1980 and 2005 growing 60% during this 25-year period as a result of City development. The population in the City is expected to increase slightly through 2035. The reason behind this is that opportunities for development are limited as the City has become almost completely built out. Table 3.3.1 show the current and projected population growth.

Table 3.3.1
Population — Current and Projected

	2020	2025	2030	2035	2040	Data source
Service Area Population[1]	55,461	57,404	58,919	60,218	61,266	E-1 Cities, Counties, and the State Population Estimates with Annual Percent Change (1/1/2020) and P-2A Total Population for California and Counties (2010 – 2060)

[1] Service area population is defined as the population served by the distribution system.

3.4 OTHER DEMOGRAPHIC FACTORS

Urban Water Management Planning Act Requirement:

CWC Section 10631 Describe the service area – other demographic factors affecting the supplier's water management planning

With decreased new development and increased City water conservation in the past 10 years, the City domestic water demand has been fairly flat while averaging approximately 4.7 million gallons per day. City water demand is estimated to increase slightly in the future as a result of the projected increase in population. City water demand also fluctuates as a result of climatic variations. For example, between 1996/97 and 2004/05, City water demand increased 7.0% in 1997/98 when rainfall was high (29.7 inches) and decreased 5.0% in 2003/04 when rainfall was low (7.5 inches).

3.5 SERVICE AREA SOCIOECONOMICS

Urban Water Management Planning Act Requirement:

CWC Section 10631 Describe the service area – Describe the service area of the supplier, including… other social, economic, and demographic factors affecting the supplier's water management planning.

When it comes to evaluating socioeconomic correlations to increased community water use and ultimately, water insecurity, low-income areas are of particular interest. Low-income individuals are often limited financially and can only afford older rundown homes with less upkeep. Buildings of that nature tend to lack proper piping connections, water fixture sealings, etc. making them prone to drips, leaks, and floods. Poor water control characteristics such as these raise a red flag.

Not to any surprise, as the U.S. has seen a gradual increase in overall GDP Growth Rates from 2013 through 2018 at an average of 0.19% a year, The City has also seen a steady increase in median household incomes starting at $44,934 in 2013 and progressing all the way up to $55,670 in 2019 (www.census.gov/quickfacts). Most notably, there was an 8.09% household income growth between 2017 and 2018. However, despite this positive rise in income, the City in general is consistently well below the CA median household income values by approximately $20,000, classifying the City as a disadvantaged community. Furthermore, current statistics show that 21%

of individuals residing in the City are below the poverty level. To put this into perspective, in 2018, 10,200 out of 54,400 people (18.7%) in the City were under the poverty line compared to the national average of 13.1%.

As of 2019, the City has experienced an unemployment rate of 5.4%, distinctly larger than the US average of 3.7%. Unemployment can impact water use according to a study done by Cranfield University. According to research, household water consumption changes significantly after the start of the COVID-19 lockdown. Although the study was not focused on the City, the water use patterns for the unemployed are likely similar. At home activities such as showering, laundry, gardening, etc. can happen more frequently when individuals increase time spent at home. As the City's unemployment rate fluctuates, the City may find a correlation between water use and unemployment.

4 SYSTEM WATER USE

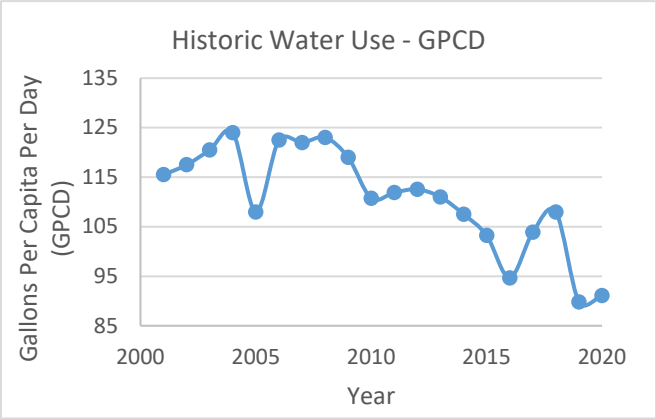
4.1 WATER USE

Urban Water Management Planning Act Requirement:

10608.20(e)(1)&(2) Quantify, to the extent records are available, past and current water use, and projected water use (over the same five-year increments described in subdivision (a)), identifying the uses among water use sectors, including, but not necessarily limited to, all of the following uses: (A) Single-family residential; (B) Multifamily; (C) Commercial; (D) Industrial; (E) Institutional and governmental; (F) Landscape; (G) Sales to other agencies; (H) Saline water intrusion barriers, groundwater recharge, or conjunctive use, or any combination thereof; (I) Agricultural.

Historic Water Use

Figure 4.1.1 – Historic Water Use



The City of Paramount's (City) Water System currently serves approximately 55,461 people within its service area. With the City being almost completely built-out, significant growth or increase in water demands are not anticipated in future years.

Key factors that affect water demands are; population growth, increases in land use development, industrial growth, and reductions in annual rainfall. For the City, population and rainfall exhibit the greatest influence. Usage of water per capita day ranged primarily between 115 – 124 GPCD during the 2001 – 2010 baseline period and has since been trending lower, as shown in Figure 4.1.1, with 2019 having the lowest per capita water use in the past 20 years. Consumption has ranged from a low of 90 GPCD in 2019 to a maximum of 124 GPCD in 2004. The average use per day during the period from 2001 through 2020 was 110 gallons per person.

Table 4.1.1
Historic Water Use

Fiscal Year	Gross Water Use (MGY)	Population	Usage Per Capita Day (GPCD)
2001	2,346	55,929	116
2002	2,398	56,663	118
2003	2,464	57,210	121
2004	2,534	57,577	124
2005	2,198	57,723	108
2006	2,461	57,626	122
2007	2,434	57,601	122
2008	2,444	57,638	123
2009	2,365	57,874	120
2010	2,187	57,989	111
2011	2,214	54,191	112
2012	2,238	54,486	113
2013	2,217	54,722	111
2014	2,162	55,076	108
2015	2,084	55,302	103
2016	1,898	54,909	95
2017	2,082	54,909	104
2018	2,143	54,387	108
2019	1,769	53,955	90
2020	1,799	54,098	91

The City's past water use and number of customer connections for the 2005, 2010, and 2015 calendar years are shown in Table 4.1.2, Table 4.1.3, and Table 4.1.4, respectively.

Table 4.1.2
Water Deliveries — Actual, 2005

	2005				
	Metered		Not Metered		Total
Water Use Sectors	# of Accounts	Volume	# of Accounts	Volume	Volume
Single family	4,602	2,089	0	0	2,089
Multi-family	1,664	2,933	0	0	2,933
Commercial	504	827	0	0	827
Industrial	596	1,267	0	0	1,267
Institutional/governmental	0	0	0	0	0
Landscape	502	519	0	0	519
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
Total	7,868	7,635	0	0	7,635

Units: acre-feet per year

Table 4.1.3
Water Deliveries — Actual, 2010

	2010				
	Metered		Not metered		Total
Water use sectors	# of Accounts	Volume	# of Accounts	Volume	Volume
Single family	4,386	1,631	0	0	1,631
Multi-family	1,629	2,372	0	0	2,372
Commercial	525	680	0	0	680
Industrial	545	1,101	0	0	1,101
Institutional/governmental	0	0	0	0	0
Landscape	238	393	0	0	393
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
Total	7,323	6,177	0	0	6,177

Units: acre-feet per year

Table 4.1.4
Water Deliveries — Actual, 2015

	2015				
	Metered		Not metered		Total
Water use sectors	# of Accounts	Volume	# of Accounts	Volume	Volume
Single family	4,386	1,631	0	0	1,631
Multi-family	1,629	2,372	0	0	2,372
Commercial	525	680	0	0	680
Industrial	545	1,101	0	0	1,101
Institutional/governmental	0	0	0	0	0
Landscape	238	393	0	0	393
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
Total	7,323	6,177	0	0	6,177

Units: acre-feet per year

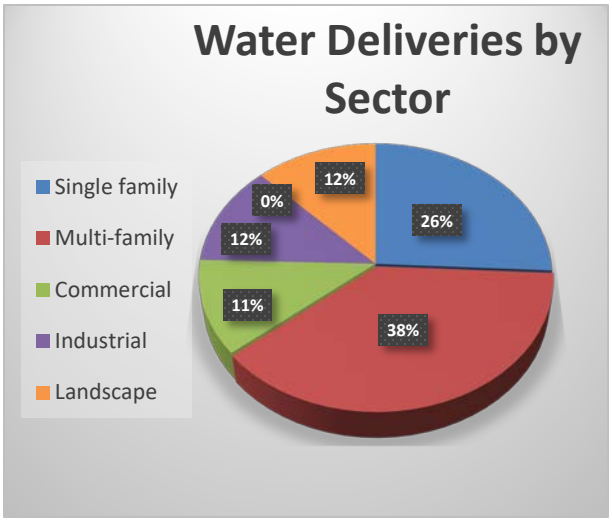
Table 4.1.5
Water Deliveries — Actual, 2020

	2020				
	Metered		Not metered		Total
Water use sectors	# of Accounts	Volume	# of Accounts	Volume	Volume
Single family	4,386	1,400	0	0	1,400
Multi-family	1,629	2,073	0	0	2,073
Commercial	525	623	0	0	623
Industrial	545	666	0	0	666
Institutional/governmental	0	0	0	0	0
Landscape	238	665	0	0	665
Agriculture	0	0	0	0	0
Other	0	0	0	0	0
Total	7,323	5,427	0	0	5,427

Units: acre-feet per year

Current and Projected Water Use by Sector

Figure 4.1.2 –Water Deliveries



In 2020, the City used 5,427 acre-feet of potable water, as measured by metered sales and estimated distribution system losses. Average water deliveries, shown in Figure 4.1.2, are broken down into the following sectors:

- Single Family Residential
- Multi-Family Residential
- Commercial/Institutional
- Industrial
- Landscape
- Other/Agricultural (less than 1% of deliveries, combined)

Retail water deliveries are projected for the next 20 years, in five-year increments, and are broken down by sector. The future estimations of water use (by sector) are extrapolated based on the current (2020) values and anticipated population growth.

Residential Sector

As Table 4.1.6 indicates, the majority of the water demand in the community will continue to be in the residential sector. Due to the lack of available space, the City does not have plans for significant new residential development in the near future. In the next 20 years, some form of residential redevelopment may occur; however, such development is not expected to place a heavy demand on the City's water supply.

Commercial/Institutional Sector

Commercial and institutional/city water demand has remained fairly stable over the past few years. Since 2005, commercial development requires developers to estimate water use for landscape irrigation. Water Conservation in Landscaping Ordinance No. 825 of the City Municipal Code requires that contractors complete a water use audit, which includes the designation of low water use plants and water conserving sprinklers. If the development is located within 150 feet of a public reclaimed water distribution system, the contractor will be required to connect to it for landscape irrigation. Current and projected water demands for the City's commercial/institutional sector are shown in Tables 4.1.6 and 4.1.7.

Industrial Sector

Industrial water demand has also remained fairly stable over the past five years. However, current the World Energy Facility is in the process of converting its oil refining operations to renewable energy. The system upgrades are expected to require an increase of 2446 acre-feet-per-year (AFY) with a total water demand of 2507 AFY for the facility. Fortunately, the facility is parallel to CBMWD's reclaimed water distribution line in the City and intends to use reclaimed water to meet the increase demand thereby relieving demand on the City's potable water supply.

Landscape Sector

The current and projected water demands for landscape irrigation are shown in Tables 4.1.6 and 4.1.7. Consistent with the Water Conservation in Landscaping Ordinance No. 825 discussed in the Commercial Sector above, current landscaping water demand has fallen below past historic (2005) levels.

Agricultural Sector

Agricultural water use is expected to continue to represent less than 1% of total water use throughout the planning horizon, as shown in Table 4.1.6. In addition, there is currently a single customer receiving recycled water for agricultural purposes.

Other

The City's water use records fall comfortably into the previous categories provided. As a result, the City does not have any "other" water usage to report.

Distribution System Losses

The City's distribution system losses were estimated for each of the five past planning years utilizing American Water Works Association (AWWA) water audit methodology and software. Distribution system losses were then projected for the next 20 years using the average ratio of water losses to total water deliveries over the past 5 years (8%). Refer to Appendix M for AWWA Water loss report and Section 4.1.6 for more information.

Table 4.1.6
Demands for Potable and Raw Water - Actual

Use Type	2020 Actual		
	Additional Description	Level of Treatment When Delivered	Volume
Single Family	Single family detached dwellings	Drinking Water	1,400
Multi-Family	Duplexes, town homes, condominiums, apartments, and trailer parks	Drinking Water	2,073
Commercial	Commercial, Institutional, and Governmental: hotels, schools, prisons, hospitals, nursing homes, dormitories, retail establishments, office buildings, gas stations, etc.	Drinking Water	623
Industrial	Industrial parks, manufacturing, warehouses, utilities, assemblers	Drinking Water	666
Landscape	Play fields, golf courses, roadways, median strips, cemeteries, parks, and other dedicated landscape	Drinking Water	665
Agricultural	Irrigation of commercially-grown crops and other dedicated agricultural connections	Drinking Water	0
Losses	Distribution System Losses (from AWWA Water System Audit Worksheets)	Drinking Water	410
Other	Unbilled/Unmetered Water Use(from AWWA Water System Audit Worksheets)	Drinking Water	0
		TOTAL	5,837

Note: Commercial and Institutional customers are combined and included in the Commercial Use Category.
Note: Coordinates with WUE table 4-1 R

Table 4.1.7 Demands for Potable and Raw Water - Projected						
Use Type	Additional Description *(as needed)*	Projected Water Use *Report To the Extent that Records are Available*				
		2025	2030	2035	2040	2045-opt
Single Family		1,428	1,457	1,486	1,516	1,546
Multi-Family		2,115	2,157	2,200	2,244	2,289
Commercial	Commercial and Institutional users aggregated into this category.	636	648	661	675	688
Industrial		680	693	707	721	736
Landscape		678	692	705	720	734
Agricultural irrigation		0	0	0	0	0
Losses	Distribution System Losses (per AWWA Water Audit worksheets)	418	427	435	444	453
	TOTAL	5,955	6,074	6,194	6,320	6,446
NOTES: Coordinates with WUE Table 4-2 R						

Distribution System Water Losses

Urban Water Management Planning Act Requirement:

CWC 10631(e)(1) Quantify, to the extent records are available, past and current water use over the same five-year increments described in subdivision (a), and projected water use, identifying the uses among water use sectors, including but not necessarily limited to, all of the following uses: …

(J) Distribution system water loss

(3)(A) and (C) Retail supplies shall provide quantified distribution system losses for each of the five preceding years and whether or not the state standard was met. .

(B) The distribution system water loss quantification shall be reported in accordance with a worksheet approved or developed by the department through a public process. The water loss quantification worksheet shall be based on the water system balance methodology developed by the American Water Works Association.

Distribution system water losses were quantified for FY 2014-2020 (except FY 2015) using the DWR Water Audit Method, calculated by subtracting the total metered deliveries for the year from the total water volume into the system (well production and imported water) less any change in system storage, adjusted for meter accuracy. The worksheets can be found in Appendix M. In FY 2019-2020, distribution system losses were approximately 8% of total retail water deliveries. Current system losses are summarized in Table 4.1.8, and projected system losses are included in Table 4.1.6.

Table 4.1.9 Last Five Years of Water Loss Audit Reporting	
Reporting Period Start Date	Volume of Water Loss
7/2014	690
7/2016	891
7/2017	943
7/2018	217
7/2019	410

Notes: A Water Loss Report was not developed for the Fiscal Year starting in 2015. The 2014 starting year report which was completed as part of the 2015 UWMP was used which is estimated to closely mirror the losses for reporting year 2015.
Notes: Coordinates with WUE Table 4-4 R

Total Water Demands

The total past, current, and future water demands for the City are summarized in Table 4.1.9.

Table 4.1.10 Total Water Demands						
	2020	2025	2030	2035	2040	2045 *(opt)*
Potable and Raw Water *From Tables 4.1.5 and 4.1.6*	5,837	5,955	6,074	6,194	6,320	6,446
Recycled Water Demand *From Table 6.5.3*	312	312	312	312	312	0
TOTAL WATER DEMAND	6,149	6,267	6,386	6,506	6,632	6,446

Notes: Coordinates with WUE Table 4-3R

Water Use for Lower Income Households

Urban Water Management Planning Act Requirement:

10631.1(a) The water use projections required by Section 10631 shall include projected water use for single-family and multi-family residential housing needed for lower income households, as defined in Section 50079.5 of the Health and Safety Code, as identified in the housing element of any city, county, or city and county in the service area of the supplier.

The Housing Element of the City's General Plan was used to obtain lower income housing data, and these residential water demands were projected for the next 20 years by determining: a) the

number of lower income single-family and multi-family housing units projected for the service area; and b) estimating the future water use for these lower income housing units. According to the 2014 Housing Element Update, the projected total single-family and multi-family housing units required for extremely low-, very low- and low-income households were 42 dwelling units. The future water use for these units was then estimated using current and 20x2020 target per capita water use values and the average household size for the City, as obtained from 2015-2019 Census data. The low-income projected water use estimates are given in Table 4.1.10 and are also included in the total projected water use shown in Tables 4.1.6 and 4.1.9.

Table 4.1.11
Low-Income Projected Water Demands

Low Income Water Demands	2025	2030	2035	2040
Single-family residential	1.8	1.8	1.8	1.8
Multi-family residential	0.5	0.5	0.5	0.5
Total	2.3	2.3	2.3	2.3

Units: acre-feet per year

Estimating Future Water Savings

Urban Water Management Planning Act Requirement:

10631 (e)(4)(A) If available and applicable to an urban water supplier, water use projections may display and account for the water savings estimated to result from adopted codes, standards, ordinances, or transportation and land use plans identified by the urban water supplier, as applicable to the service area. (B) To the extent that an urban water supplier reports the information described in subparagraph (A), an urban water supplier shall do both of the following: (i) Provide citations of the various codes, standards, ordinances, or transportation and land use plans utilized in making the projections (ii) Indicate the extent that the water use projections consider savings from codes, standards, ordinances, or transportation and land use plans. Water use projections that do not account for these water savings shall be noted of that fact.

The City did not consider future water savings when projecting water use, which is reflected in Table 4.1.11.

Table 4.1.12 Inclusion in Water Use Projections	
Are Future Water Savings Included in Projections?	No
If "Yes" to above, state the section or page number, in the cell to the right, where citations of the codes, ordinances, etc… utilized in demand projections are found.	
Are Lower Income Residential Demands Included In Projections?	Yes

Note: Coordinates with WUE Table 4-5 R

4.2 WATER DEMAND PROJECTIONS

Urban Water Management Planning Act Requirement:

10631(k) Urban water suppliers that rely upon a wholesale agency for a source of water shall provide the wholesale agency with water use projections from that agency for that source of water in five-year increments to 20 years or as far as data is available. An urban water supplier may rely upon water supply information provided by the wholesale agency in fulfilling the plan informational requirements of subdivisions (b) and (c).

The City relies on wholesale water from the Central Basin Municipal Water District as one of the primary sources of water. Table 4.2.1 is provided to quantify the district demand projections provided to CBMWD for incorporation into the CBMWD's Urban Water Management Plan for average year conditions.

Table 4.2.13
Retail Agency Demand Projections Provided to Wholesale Suppliers

Wholesaler	2025	2030	2035	2040
CBMWD	637	756	876	1,128
Total	637	756	876	1,128

Units: acre-feet per year
Note: The values provided above are the total water demand estimates with the City's adjudicated groundwater allocation removed. Pumping capacity was based on 2020 values (5318 AF)

4.3 WATER USE REDUCTION PLAN

Urban Water Management Planning Act Requirement:

CWC §10608.29 Urban wholesale water suppliers shall include in the urban water management plans … an assessment of their present and proposed future measures, programs, and policies to help achieve the water use reductions required by this part (10608.36). Urban retail water suppliers are to prepare a plan for implementing the Water Conservation bill of 2009 requirements and conduct a public meeting which includes consideration of economic impacts.

The City has implemented an economical, yet sound, water use reduction plan in order to meet the 20x2020 water use reduction requirements. Options to reduce water demand in the City include:

- Working with CBMWD to expand offerings of recycled water for irrigation purposes and to existing industrial customers, such as the Paramount Refinery.
- Increasing public awareness regarding water conservation requirements and efforts that can be easily implemented to conserve water.
- Complying with the 14 Demand Management Measures for water conservation.

5 SB X7-7 Baselines and Targets

5.1 WATER CONSERVATION BILL OF 2009 - BASELINES AND TARGETS

Urban Water Management Planning Act Requirement:

10608.20(e) An urban retail water supplier shall include in its urban water management plan … due in 2010 the 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.

In order to improve the Sacramento-San Joaquin Delta, in 2008 Governor Schwarzenegger directed State water agencies to develop a plan to achieve a twenty percent per capita water use reduction by the year 2020. The Water Conservation Act of 2009 (Senate Bill x7-7), passed in November 2009, provided the legislative framework to implement the conservation goals, and required retail water suppliers to detail their strategy for achieving the reduction requirement in their 2010 Urban Water Management Plan Updates. The Urban Water Management Planning Act and SBx7-7 information can be found using the links provided.

Explicit methodologies were developed by the California Department of Water Resources (DWR) to assist retail water suppliers in complying with the Water Conservation Act of 2009, and they are detailed in the technical document, *Methodologies for Calculating Baseline and Compliance Urban Per Capita Water Use*, DWR, March 2016. The City of Paramount (City) utilized the DWR methods when determining its baseline, interim, and water use target values (20x2020 targets), the steps of which are described in detail in the *Methodologies* document. A summary of the calculations is provided in DWR's SB X7-7 Verification Form, Appendix M.

Water suppliers are given the option of determining their 20x2020 target values either individually or through a regional alliance. The City is part of the Los Angeles Gateway Region that has formed a regional alliance, and the City has chosen to determine its baseline and target values both individually and as part of the alliance (Option #1 in the *Methodologies* document). The City's individual baseline and target values are provided in this section. The regional alliance's values can be found in the Gateway Region 2020 UWMP Update.

For the 2015 UWMP Update, DWR determined that significant discrepancies existed between the Department of Finance (DOF) projected populations for 2010 (based on 2000 U.S. Census data) and actual populations for 2010, based on 2010 U.S. Census data (released in 2012). Therefore, the City recalculated its baseline population numbers for years 2001 – 2010 during the 2015 UWMP Update using 2000 and 2010 Census data. A summary of the revised baselines and targets is provided in Table 5.1.1. These baselines years have been maintained for the current update.

Table 5.1.1
Baselines and Targets Summary

Baseline Period	Start Year	End Year	Average Baseline GPCD*	Confirmed 2020 Target*
10-15 year	*2001*	*2010*	*118*	*114*
5 Year	*2004*	*2008*	*120*	
*All values are in Gallons per Capita per Day (GPCD)				

Compliance Year 2020 – Interim Water Use Target

Table 5.1.2 on the following page summarizes the City's compliance year 2020 water use, which illustrates that the City has met its 2020 Target.

Table 5.1.2
2020 Compliance

Actual 2020 GPCD	2020 Interim Target GPCD	Optional Adjustments to 2015 GPCD *From Methodology 8 found in Appendix L*					2020 GPCD *(Adjusted if applicable)*	Did Supplier Achieve Targeted Reduction for 2020? Y/N
		Extraordinary Events	Economic Adjustment	Weather Normalization	TOTAL Adjustments	Adjusted 2020 GPCD		
89	114	0	0	0	0	89	89	Yes

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

6 SYSTEM SUPPLIES

6.1 WATER SOURCES

Urban Water Management Planning Act Requirement:

10631 (b) Identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier over the same five-year increments described in subdivision (a).

The City of Paramount (City) utilizes both potable and recycled water. The City obtains potable water from two sources: directly pumped groundwater and imported water purchased through the Central Basin Municipal Water District (CBMWD), who in turn receives the water through the Metropolitan Water District of Southern California (MWD). In addition to distributing potable water, the City also has a recycled water system that provided 312 AF of recycled water in 2020. The City provided a total of 6,149 AF of water to a population of approximately 55,461 in 2020. As detailed in Chapter 4, demands are expected to continue to increase in the next 20 years by around 7%, and the water supply available to the City is expected to meet the water demand through the planning horizon. More information comparing the projected water supply and demand can be found in Chapter 7.

The City obtains its groundwater from the Central Subbasin, one of four subbasins in the Coastal Plain of Los Angeles. The Central Subbasin is commonly referred to as the Central Basin and is identified as such through the remainder of the report. The Central Basin is an adjudicated basin. For the supply section, it is assumed that the City pumps the total allotted amount of groundwater from the Central Basin: 5,319 AF. More information on the adjudication of the Central Basin can be found in Section 6.2, which discusses the groundwater sources for the City.

The total current and projected supplies available to the city through CBMWD, pumped groundwater, and recycled water are shown in Tables 6.1.1 and 6.1.2, respectively.

Table 6.1.1
Water Supplies — Actual

Water Supply	Additional Detail on Water Supply	2020		
		Actual Volume	Water Quality	Total Right or Safe Yield *(optional)*
Add additional rows as needed				
Groundwater	Central Basin	5,318	Drinking Water	5,883
Purchased or Imported Water	CBMWD	204	Drinking Water	
Recycled Water	CBMWD Century System	312	Recycled Water	
	Total	5,859		

NOTE: Corresponds with WUE Table 6-8R.

Table 6.1.2
Water Supplies — Projected

Water Supply	Additional Detail on Water Supply	Projected Water Supply *Report To the Extent Practicable*							
		2025		2030		2035		2040	
		Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*	Reasonably Available Volume	Total Right or Safe Yield *(optional)*
Add additional rows as needed									
Groundwater	Central Basin	5,883		5,883		5,883		5,883	
Purchased or Imported Water	CBMWD	1681		1681		1681		1681	
Recycled Water	CBMWD Century System	312		338		338		338	
Total		7876	0	7902	0	7902	0	7902	0

NOTES:
- Groundwater supplies projected based on total allowable pumping allocation; purchased water supplies estimated based on 5-year average deliveries; recycled water supplies estimated based on highest annual deliveries recorded over the past 5 years.
- Corresponds to WUE Table 6-9R.
- The CBMWD 2020 UWMP was not available for review at the time of this draft publication. Information will be provided in the final 2020 City of Paramount UWMP report. Currently, 2015 values were used for planning purposes and based off 5-year average deliveries.

Groundwater Supply

The City utilizes groundwater from the adjudicated Central Basin. The total dissolved solids (TDS) content in the Central Basin ranges from 200 to 2,500 mg/L, according to data from 293 public supply wells. The average for these wells is 453 mg/L. The groundwater supply to the City is discussed further in Section 6.2.

Wholesale Water Supply

Water for use in the City is purchased through the CBMWD. CBMWD obtains its water from a number of sources, including local groundwater supplies and recycled water. However, the majority of water supplied to CBMWD is from MWD as part of the State Water Project (SWP). The SWP is a series of reservoirs, aqueducts, and pumping facilities that convey water from Northern to Southern California. The water for use within the City is collected and delivered to MWD via the SWP, which is subsequently treated at either the Weymouth Filtration Plant or the Jensen Filtration Plant. Water from either of these filtration plants is then transferred to CBMWD. The quality of the imported water is shown in the following table:

Table 6.1.3
Quality of Imported Water

Constituent	Colorado River Water [1] (mg/L)	State Water Project Water [2] (mg/L)
Chloride	91	55
Sulfate	218	53
Hardness (as $CaCO_3$)	265	112
Total Dissolved Solids	579	252

NOTES:
1. At Lake Mathews - from 2020 MWD Annual Water Quality Report, Table 4-3
2. At Castaic Lake - from 2020 MWD Annual Water Quality Report, Table 4-3

In 2020, CBMWD delivered 204 AF of water to the City for distribution. Prior to the construction of Well No. 15 in 2011-2012, the City purchased 2,864 AFY on average from CBMWD. However, with the addition of Well No. 15 (and the planned operation of Well No. 16), the City has currently been able to more fully utilize its allowable pumping allocation, and its yearly purchased water deliveries have dropped accordingly. This trend is expected to continue throughout the 20-year planning horizon, and in the future as demand increases, the reduced purchased water demands from CBMWD will continue to be a reliable supply to supplement the City's groundwater source.

Recycled Water Supply

The City provides recycled water for landscape irrigation, agricultural irrigation, and industrial uses throughout the service area. The City's Recycled Water system is discussed in detail in Section 6.5.

6.2 GROUNDWATER

Urban Water Management Planning Act Requirement:

10631 (b) (Is) groundwater…identified as an existing or planned source of water available to the supplier?

The City utilizes groundwater pumped from the Central Basin. There are currently no plans to discontinue pumping water from the Central Basin for potable use.

Urban Water Management Planning Act Requirement:

10631 (b)(1) If groundwater is identified as an existing or planned course of water available to the supplier provide…a copy of any groundwater management plan adopted by the urban water supplier, including plans adopted pursuant to Part 2.75 (commencing with Section 10750), or any other specific authorization for groundwater management.

The Central Basin was adjudicated in 1965, and the Department of Water Resources (DWR) was appointed Watermaster until retiring its duties on June 30, 2014, due to the third Central Basin Judgment 3rd Amendment being entered into record. Beginning July 1, 2014, three new bodies began their roles as Central Basin Watermaster:

- Water Rights Panel (The Panel), made up of seven Central Basin water rights holders
- Administrative Body (the Water Replenishment District of Southern California (WRD))
- Storage Panel (The Panel plus the WRD Board of Directors)

Every month extractions are reported to the Watermaster by each individual pumper. This allows the Watermaster to regulate the water rights of the Subbasin. The Central Basin does not have a groundwater management plan because it is adjudicated and the Watermaster manages groundwater extractions.

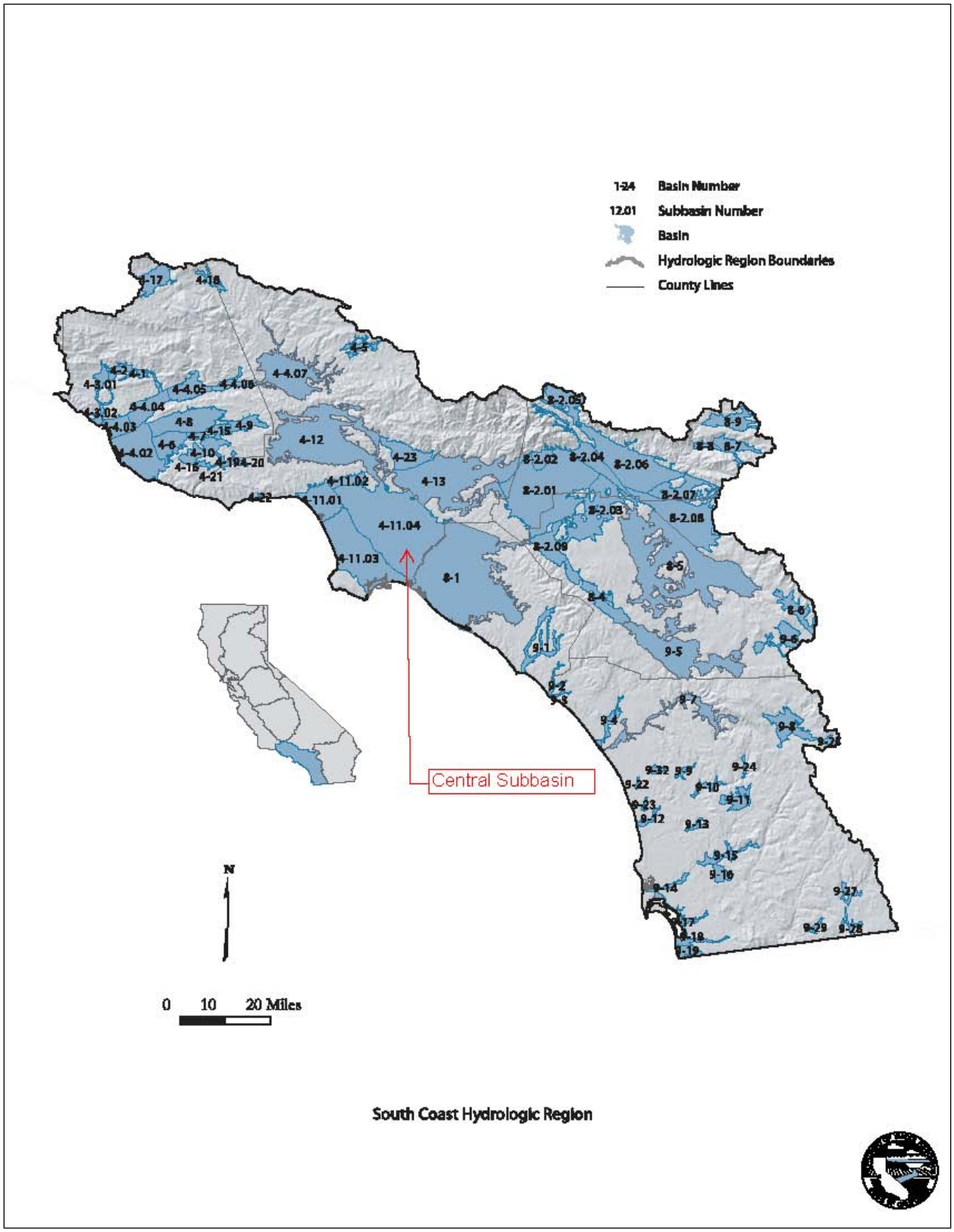
Urban Water Management Planning Act Requirement:

10631 (b)(2) If groundwater is identified as an existing or planned course of water available to the supplier provide…a description of any groundwater basin or basins from which the urban water supplier pumps groundwater.

As mentioned above, the City pumps water from the Los Angeles County Central Subbasin, a large subbasin that makes up part of the Coastal Plan of Los Angeles Basin. The total surface area of this subbasin is approximately 177,000 acres. It is bounded on the north by a surface divide called the La Brea high, and on the northeast and east by emergent less permeable tertiary rocks of the Elysia, Repetto, Merced and Puente Hills. The southeast boundary between Central Basin and the Orange County Groundwater Basin roughly follows Coyote Creek, which is a regional drainage boundary. The southwest boundary is formed by the Newport Inglewood fault system and the associated folded rocks of the Newport Inglewood uplift. The Los Angeles and San Gabriel Rivers drain inland basins and pass across the surface of the Central Basin on their way to the Pacific Ocean. Average precipitation throughout the Subbasin ranges from 11 to 13 inches with an average of approximately 12 inches.

The description of the Central Basin is provided in DWR's Bulletin 118. Additionally, the Central Basin's location as part of the South Coast Hydrologic Region can be seen in Figure 6.2.1.

Figure 6.2.1: Central Subbasin Location



Urban Water Management Planning Act Requirement:

10631 (b)(2) For those basins for which a court or the board has adjudicated the rights to pump groundwater, provide a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the urban water supplier has the legal right to pump under the order or decree.

A court ordered adjudication for the Central Basin was issued in 1965. The adjudication was a response to rapidly declining groundwater levels in the basin due to overdraft that caused partial seawater intrusion. The Central Basin Judgment (currently the third Central Basin Judgment 3rd Amendment) can be found on the Central Basin Watermaster website.

The total allotted pumping rights from the Central Basin from all wells is 220,000 AFY. The total allotted pumping rights for the City is 5,883 AFY. The City may exceed its total allotment under two circumstances. The first of these is in the case that in the previous year, the City did not pump the total 5,883 AF of water. If this occurs, up to 20% of the total allotment may be carried over the subsequent year. The second case in which the City may exceed its water pumping rights is if another water retailer chooses to lease water pumping rights to the City. Although the City has in past leased a portion of its water pumping rights to other retailers, with the additional pumping capacity provided by Well No. 15 (and the planned Well No. 16), it is expected that the City will fully utilize its allotted pumping rights moving forward.

It is known that the total allotted pumping rights exceed the natural replenishment of groundwater to the Central Basin. Although the users of the Central Basin pump below their total allotted rights (approximately 173,000 AF were pumped in FY 2019-2020; from “Summary of Pertinent Data” in the Central Basin Watermaster Report, 2019 - 2020), possible conditions of overdraft must still be considered. To avoid conditions of overdraft, the WRD was formed to ensure that water was purchased where necessary to fully replenish the quantity of groundwater that could not be restored through natural processes. The WRD manages the financial and logistical aspect of purchasing water to maintain safe groundwater levels.

Urban Water Management Planning Act Requirement:

10631 (b)(2) For basins that have not been adjudicated, (provide) information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current official departmental bulletin that characterizes the condition of the groundwater basin, and a detailed description of the efforts being undertaken by the urban water supplier to eliminate the long-term overdraft condition.

The Central Basin is an adjudicated Subbasin, and therefore this section is not applicable.

Urban Water Management Planning Act Requirement:

10631 (b)(3) (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. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

Table 6.2.1 illustrates the amount of groundwater pumped from the Central Basin over the last five years.

Table 6.2.1
Groundwater Volume Pumped

☐	Supplier does not pump groundwater. The supplier will not complete the table below.					
Groundwater Type	Location or Basin Name	2016	2017	2018	2019	2020
Add additional rows as needed						
Alluvial Basin	Central Basin	5198.09	6313.56	6031.26	4950.48	5318.25
	TOTAL	5,198	6,314	6,031	4,951	5,318

Note: Some years include drought carry over volumes from previous years allowing the City to pump more than their normal pumping rights.
Note: Corresponds to WUE Table 6-1R.

Prior to FY 2013-2014, the pumping capacity of the City's two wells (Wells 13 and 14) was insufficient to fully utilize its groundwater rights. Imported water from the CBMWD was used to supplement the groundwater supply, and a portion of the City's allowable pumping allocation was leased to other parties. In addition, water quality issues with Well No. 13 and equipment malfunctions continued to hinder groundwater production. Because of these issues, equipment upgrades were performed, treatment facilities were installed at Well No. 13, a proactive preventive maintenance program was introduced, and a new well, Well No. 15, was constructed to provide

a more reliable water supply source. This has allowed Well No. 13 to be transitioned to a backup facility, in case of loss of operation or scheduled maintenance of Wells 14 and 15. Together, these three sources were sufficient in meeting the total demands of the City beginning with FY 2014-2015.

Urban Water Management Planning Act Requirement:

10631 (b)(4) (Provide a) detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the urban water supplier. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

The City intends to continue using groundwater pumped from the Central Basin as the majority of the supply for the City's water demand. The projected amount of water to be pumped is shown in Table 6.2.2 below. The numbers projected in Table 6.2.2 are based on the City fully utilizing its groundwater rights and supplementing with imported water from CBMWD as needed. The City's groundwater rights are compared to the forecasted water demands from Chapter 4 in order to arrive at the projections. Due to the equipment upgrades to Well No. 13 and 14, the addition of Well No. 15, and the projected use of Well No. 16 in the near future, it is not anticipated that the groundwater use in the next 20 years will fall below the amount available to the City through adjudication.

Table 6.2.2
Groundwater — Volume Projected to be Pumped

Basin name(s)	2025	2030	2035	2040
Central Basin	5,883	5,883	5,883	5,883
Total groundwater pumped	5,883	5,883	5,883	5,883
Percent of total water supply	TBD%	TBD%	TBD%	TBD%

NOTE: Corresponds to information in WUE Table 6-9R.

6.3 TRANSFER OPPORTUNITIES

Urban Water Management Planning Act Requirement:

10631 (d) Describe the opportunities for exchanges or transfers of water on a short-term or long-term basis.

CBMWD and MWD seek out opportunities for water transfer and exchanges to ensure reliability within their respective service areas. Water transfers and exchanges help water suppliers distribute water effectively to areas with limited water supplies. For example, the MWD accepts water through the SWP and Colorado River for distribution throughout Southern California. The City, although not directly involved in the planning of these opportunities, may benefit from additional water supplies as a result of MWD and CBMWD's efforts in securing water transfers and exchanges. Information on new transfer and exchange opportunities to the MWD and CBMWD can be found in the respective 2020 Urban Water Management Plans.

The City maintains three interconnections with the City of Long Beach. Although these are available for use at any time and would serve groundwater and imported water to the City, these interconnections are primarily used only during times when the CBMWD connections to the City are unavailable due to maintenance or repair, or during emergency situations. The City has no intention of using water supplied from the City of Long Beach through these connections as a short- or long-term water supply source.

The City also has manual unmetered one-way connections with the City of Downey and with the Golden State Water Company. These connections have check valves that only allow water to be supplied in one direction from the City to the other agency. And as with the connections to the City of Long Beach, the City has no intentions of using these connections as short-term or long-term transfers or exchanges.

Table 6.3.1
Transfer and Exchange Opportunities

Transfer Agency	Transfer or Exchange	Short Term or Long Term	Proposed Volume
City of Long Beach	0	0	0
City of Downey	0	0	0
Golden State Water Company	0	0	0
Total	**0**	0	0

6.4 DESALINATED WATER OPPORTUNITIES

Urban Water Management Planning Act Requirement:

10631 (i) Describe the opportunities for development of desalinated water, including but not limited to, ocean water, brackish water, and groundwater, as a long-term supply.

The City is not currently exploring the possibility of using desalinated water as a water source independently. MWD joined the National Alliance for Water Innovation (NAWI) in 2020 and has reported three (3) desalination projects within its service area in the 2020 UWMP. As an end user of water supplied through MWD, the City may receive water, or benefit in other ways (i.e. increased supplies and reliability), as a result of this effort in discovering the opportunity for desalination. Therefore, a brief description of MWD's efforts in water desalination is discussed.

In 2001, MWD created the Seawater Desalination Project (SDP) to explore the potential for using seawater as a long-term water supply. The SDP provided incentives for its member agencies to develop water through desalination; up to $250 per AF for all produced supplies. Since its inception, MWD has entered into agreements with its member agencies to fund three local seawater desalination projects amounting to 46,000 AFY of potential production. In October 2014, MWD added seawater desalination projects into its Local Resources Program (LRP), replacing the SDP program and increasing the incentives to $340 for produced supplies (recycled water, recovered groundwater and desalinated seawater). In June 2020, MWD's SDP agreements with all three (3) member agencies expired.

According to the MWD 2020 UWMP Update, Table 3-11, the Claude Bud Lewis Carlsbad Seawater Desalination production was estimated as 43,868 acre-feet in 2020. In addition, Table 3-13, in the same report, lists three (3) sweater desalination projects under development within MWD's service area. Table 6.4.1 shows the projected supplies provided by these seawater desalination plants.

Table 6.4.1 Current Desalination Projected Capacities			
Project	**Member Agency**	**Projected Capacity (AFY)**	**Status**
Carlsbad Seawater Desalination Project	San Diego County Water Authority	43,868	Operational
Huntington Beach Seawater Desalination Project	Municipal Water District of Orange County	56,000	Permitting
Doheny Desalination Project	Municipal Water District of Orange County / South Coast Water District	5,000 – 15,000	Permitting
West Basin Seawater Desalination Project	West Basin Municipal Water District	20,000 – 60,000	EIR Process
Total		124,868 – 174,868	

6.5 RECYCLED WATER OPPORTUNITIES

Urban Water Management Planning Act Requirement:

10633 Provide, to the extent available, information on recycled water and its potential for use as a water source in the service area of the urban water supplier. The preparation of the plan shall be coordinated with local water, wastewater, groundwater, and planning agencies that operate within the supplier's service area.

Note: The Los Angeles County Sanitation District (LACSD) UWMP information for 2020 was not available for this 2020 City of Paramount UWMP draft. Information will be updated as it becomes available. The most recent available data is used in the discussion.

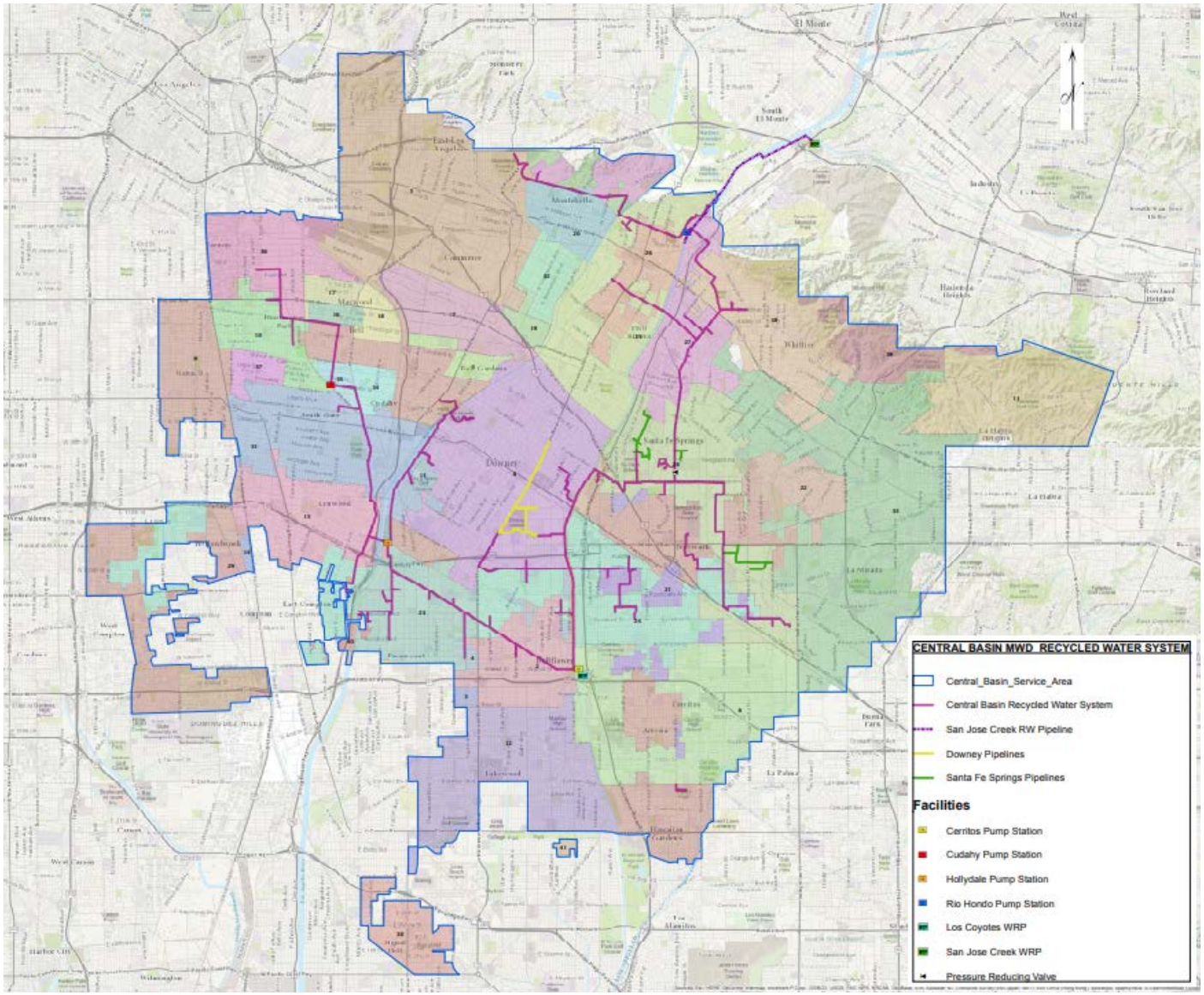
The City is committed to potable water conservation through the treatment and distribution of recycled water for non-potable uses. This effectively decreases the total water that must be purchased through CBMWD, and is a significant part in the statewide effort to conserve and manage potable water resources. Since planning and constructing its recycled water systems in the early 1990's, CBMWD has become an industry leader in water re-use.

The City is part of an integrated water recycling program that includes the Cities in Los Angeles County as well as water districts, including MWD. Wastewater is collected and treated by the Los Angeles County Sanitation District (LACSD) sewage system and sent to either the Joint Water Pollution Control Plant (JWPCP) or one of six satellite water reclamation plants (WRPs) as part of the Joint Outfall System (JOS). Wastewater destined for recycled water use undergoes tertiary

treatment (as described below) and is subsequently distributed or disposed of as necessary. Wastewater too salty for use as recycled water is sent to the JWPCP where it undergoes secondary treatment and disinfection before being discharged to the ocean. The wastewater collection and treatment system is described further in the following section. The LACSD reports nearly 130,000 AFY of wastewater was treated to recycled water quality for FY 2013-2014 in the JOS. The water produced is used either as recycled water for industrial, landscape irrigation, or agricultural use, or for groundwater recharge.

Treated wastewater from the LACSD's Los Coyotes WRP and San Jose Creek WRP is supplied through CBMWD's Century recycled water distribution system to the cities of Bellflower, Bell Gardens, Compton, Downey, Lakewood, Lynwood, Norwalk, Paramount, Santa Fe Springs, South Gate and Vernon. In 2013-2014, San Jose Creek and Los Coyotes Plants treated a total of 91,393 AF of wastewater to recycled water quality standards. Of this, 343 AF was eventually distributed to the City. The system currently consists of 1,400 miles of pipeline, with the backbone being a 30-inch pipeline paralleling the San Gabriel River. Construction of the initial system was completed in 1992, with the delivery of recycled water for applications such as landscape irrigation of parks, schools, and freeway slopes, nursery stock irrigation, and various industrial applications. The system was connected to the Rio Hondo recycled water distribution system in 1994, and both the Century and Rio Hondo systems can be partially supplied with water from either the Los Coyotes or San Jose Creek WRPs, individually or in combination. Most of the recycled water delivered through the Century distribution system actually originated at the San Jose Creek WRP. However, the usage is still reported from the Los Coyotes WRP, as there is no way to differentiate which reuse sites receive which recycled water. Therefore, for the sake of consistency, recycled water usage along the Century facilities is reported as coming from the Los Coyotes WRP, and along the Rio Hondo facilities as coming from the San Jose Creek WRP. Figure 6.5.1 shows all of the pipelines for both distribution systems, as well as all of the current recycled water use sites.

Figure 6.5.1: CBMWD Recycled Water Distribution System – 2016 Publication (CBMWD Website)



Urban Water Management Planning Act Requirement:

10633 (a) (Describe) the wastewater collection and treatment systems in the supplier's service area, including a quantification of the amount of wastewater collected and treated and the methods of wastewater disposal.

Wastewater in the City is collected by the LACSD sewage system and sent to either the JWPCP or one of six WRPs as part of the JOS. The JOS is a regional, interconnected system of facilities providing wastewater collection and treatment for residential, commercial and industrial users in 73 cities. The system includes the main JWPCP in Carson (treatment capacity of 400 mgd) and the following six satellite WRPs:

- Whittier Narrows WRP (near South El Monte, treatment capacity of 15 mgd)
- Los Coyotes WRP (Cerritos, treatment capacity of 37.5 mgd)
- San Jose Creek WRP (adjacent to the City of Industry, treatment capacity of 100 mgd)
- Long Beach WRP (Long Beach, treatment capacity of 25 mgd)
- Pomona WRP (Pomona, treatment capacity of 15 mgd)
- La Cañada WRP (La Cañada Flintridge, treatment capacity of 0.2 mgd)

Approximately two-thirds of the wastewater in the JOS is treated at the JWPCP, which carries out primary and secondary treatment prior to discharge into the ocean. The remaining one-third is treated in the six satellite WRPs. At these plants, the wastewater goes through a three stage treatment process consisting of primary, secondary, and tertiary treatment stages. After tertiary treatment, water is available for use to recycled water customers, used for groundwater recharge, or discharged into the ocean.

Upon collection of wastewater from the Cities of Los Angeles County, wastewater undergoes primary treatment. In this stage, water is collected in long concrete tanks that act as a river. Primary treatment refers to the removal of macroscopic waste particles in the water. Light materials will flow to the top and heavier materials will sink to the bottom. Both the light and heavier materials can be removed and are sent to the JWPCP for disposal.

The primary treated water is sent to the second stage: secondary treatment. Secondary treatment acts as a biological treatment step to reproduce what naturally occurs in water treatment in rivers. The same microorganisms that feed on dissolved organic particles during natural water treatment are used in secondary treatment. Oxygen is supplied to create an ideal feeding environment for the microorganisms, decreasing the overall time required for treatment. As the microorganisms complete the feeding process, they sink to the bottom and are removed to be reused in another

batch of wastewater.

Finally, the water enters tertiary treatment, where water is sent through filters to remove any last suspended particles in the water. The filters contain layers of anthracite coal, sand, and gravel. Once sent through the filters, the water is disinfected. Chlorine from the disinfection process must be removed prior to use. Following the disinfection process and the removal of excess chlorine, water is safe for use and is distributed to the customers of the LACSD as reclaimed water. Reclaimed water that is not used is discharged into the ocean.

Urban Water Management Planning Act Requirement:

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.

Approximately one-third the wastewater collected by the LACSD is treated to tertiary standards, as described above, and can be used as recycled water. The remaining two-thirds is treated to secondary standards only before being disinfected and discharged into the ocean. However, none of the collected wastewater is treated or disposed of within the City's service area, which is reflected in Table 6.5.2.

The wastewater volume generated by the City for fiscal year 2014-2015 was estimated based on the total water demand for the year, less any water use not captured by the City's sewer system. It was estimated that the water deliveries for irrigation (landscape and agricultural, including recycled water), fire hydrants, and water losses were not converted to wastewater. In addition, 42% of the total residential water deliveries were estimated to be used for indoor purposes, with 98% being captured as wastewater. The remaining residential water deliveries were assumed to be used for outdoor purposes and were not included in the wastewater estimates. 100% of the remainder of the water deliveries (commercial, industrial, and institutional) were assumed to be sent to the LACSD for treatment. In 2015, approximately 44% of the total potable water deliveries were estimated to have been captured as wastewater and sent to LACSD for treatment. The estimated wastewater collected in FY 2014-2015 is provided in Table 6.5.1 on the following page.

Table 6.5.1
Wastewater Treatment and Discharge Within Service Area in 2020

☒	No wastewater is treated or disposed of within the UWMP service area. The supplier will not complete the table below.

Wastewater Treatment Plant Name	Discharge Location Name or Identifier	Discharge Location Description	Wastewater Discharge ID Number *(optional)*	Method of Disposal	Does This Plant Treat Wastewater Generated Outside the Service Area?	Treatment Level	2020 volumes			
							Wastewater Treated	Discharged Treated Wastewater	Recycled Within Service Area	Recycled Outside of Service Area
Add additional rows as needed										
						Total	0	0	0	0

NOTEs:
- This table intentionally left blank.
- Corresponds with WUE Table 6-3R.

Urban Water Management Planning Act Requirement:

10633 (c) (Describe) the recycled water currently being used in the supplier's service area, including, but not limited to, the type, place, and quantity of use

Recycled water is used at 34 sites within the City's service area, with a total 2018-2019 demand of 332 AF. The 2018-2019 LACSD Annual Status Report on Recycled Water Use, Table 8 identified that 34 of the customers used recycled water for landscape, athletic field, and nursery irrigation purposes, a single industrial customer used recycled water for concrete manufacturing, a single golf course was provided recycled water for irrigation, and there was a single agricultural recipient. Recycled water users requiring more than 20 AFY are identified in Table 6.5.2. The current and project recycled water direct, beneficial uses are listed in Table 6.5.3.

Table 6.5.2
Recycled Water — FY 2018-2019 Use

Name	Recycled Water Demand	Water use
Compton Golf Course	44	Golf Course Irrigation
Paramount High School	30	Landscape Irrigation
Clearwater Junior High School	30	Landscape Irrigation
Robertson's Ready Mix	23	Industrial
Dills Park	31	Landscape Irrigation
Other Users	154	Landscape Irrigation

CBMWD has expanded its production of recycled water; however, the City was not allocated additional recycle water due to other projects claiming the allocations.

Table 6.5.3
Current and Projected Recycled Water Direct Beneficial Uses Within Service Area

☐	Recycled water is not used and is not planned for use within the service area of the supplier. The supplier will not complete the table below.

Name of Agency Producing (Treating) the Recycled Water:	LACSD
Name of Agency Operating the Recycled Water Distribution System:	CBMWD
Supplemental Water Added in 2020	0
Source of 2020 Supplemental Water	N/A

Beneficial Use Type		General Description of 2015 Uses	Level of Treatment	2020	2025	2030	2035	2040	2045 (opt)
Agricultural irrigation		Produce	Tertiary	1	1	1	1	1	
Landscape irrigation (excludes golf courses)		Parks, schools, athletic fields, nurseries, medians, etc.	Tertiary	244	244	244	244	244	
Golf course irrigation		Golf course irrigation.	Tertiary	44	44	44	44	44	
Commercial use									
Industrial use		Concrete manufacturer	Tertiary	23	23	23	23	23	
Geothermal and other energy production									
Seawater intrusion barrier									
Recreational impoundment									
Wetlands or wildlife habitat									
Groundwater recharge (IPR)									
Surface water augmentation (IPR)									
Direct potable reuse									
Other	Type of Use								
			Total:	312	312	312	312	312	0

NOTES:
- IPR = Indirect Potable Reuse
- CBMWD has increased their production of recycled water; however, City of Paramount was not allocated additional recycled water in the foreseeable future.
- Corresponds to WUE Table 6-4R.

Urban Water Management Planning Act Requirement:

10633 (d) (Describe and quantify) the potential uses of recycled water, including, but not limited to, agricultural irrigation, landscape irrigation, wildlife habitat enhancement, wetlands, industrial reuse, groundwater recharge, indirect potable reuse, and other appropriate uses, and a determination with regard to the technical and economic feasibility of serving those uses.

The 2008 CBMWD Recycled Water Master Plan identified areas for expansion of the entire CBMWD recycled water system. In total, the plan identified an additional 55,479 AFY of potential for recycled water use within the service areas of the CBMWD, SGVMWD, and USGVMWD. Of this potential additional use, 1,147 AFY was identified as demand that could be supplied through the City's recycled water system. The types and feasibility of these are located in Table 6.5.4. Expanding the recycled water system based on these recommendations was not considered feasible by the City because the CBMWD's capital improvement plan did not include these projects. Instead, the major project, the Southeast Water Reliability Project (SWRP), involving a much higher potential of recycled water users, was prioritized by CBMWD.

The City independently identified roadway medians adjacent to the existing recycled water distribution system during its 2015 Water Master Plan Update that would benefit from recycled water use, and the projects have been included in the City's capital improvement program. The SWRP and City's plans are described further in later sections.

Table 6.5.4
Recycled Water — Potential Future Use

User type	Description	Feasibility	2020	2025	2030	2035
Agricultural irrigation						
Landscape irrigation (CBMWD 2008 RWMP)	Parks, School Districts, Medians, Nursery's, etc.	**No**	612	612	612	612
Landscape irrigation (Paramount 2015 Water Master Plan Update)	Medians	**Yes**	0	26	26	26
Commercial irrigation[3]						
Golf course irrigation						
Wildlife habitat						
Wetlands						
Industrial reuse	Laundry, Paramount Petroleum, Metals Processing	**No**	535	535	535	535
Groundwater recharge						
Seawater barrier						
Geothermal/Energy						
Indirect potable reuse						
	Total		1,147	1,173	1,173	1,173

Urban Water Management Planning Act Requirement:

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 pursuant to this subdivision.

Table 6.5.5 shows the projected 2015 use for recycled water in 2020. Table 6.5.6 shows the current and projected recycled water uses within the City's service area. It can be seen that the actual use for 2020 did not meet the expected projection. This could be due to a general decrease in the use of recycled water, both within the City and throughout the whole customer base of the LACSD.

Table 6.5.5
2015 UWMP Recycled Water Use Projection Compared to 2020 Actual

☐	Recycled water was not used in 2015 nor projected for use in 2020. The supplier will not complete the table below.

Use Type		2015 Projection for 2020	2020 actual use
Agricultural irrigation		2	1
Landscape irrigation (excludes golf courses)		302	244
Golf course irrigation		29	44
Commercial use			
Industrial use		10	23
Geothermal and other energy production			
Seawater intrusion barrier			
Recreational impoundment			
Wetlands or wildlife habitat			
Groundwater recharge (IPR)			
Surface water augmentation (IPR)			
Direct potable reuse			
Other	Required for this use		
Total		343	312

NOTES: Corresponds to WUE Table 6-5R.

Urban Water Management Planning Act Requirement:

10633 (f) (Describe the) actions, including financial incentives, 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.

The City, CBMWD, and MWD encourage recycled water use among its customers. One of the most compelling ways to encourage the use of recycled water is through financial incentives. Recycled water is available at anywhere from a 30-50% discount to customers who use it over potable water. This allows financial savings while encouraging water conservation. In addition, the CBMWD encourages the use of recycled water by emphasizing the benefits of recycled water to its customers. Among these benefits include the increased reliability and the use of recycled water being consistent with the statewide goals for water conservation. CBMWD notes that, even during a drought, wastewater will still be produced and must be treated to recycled water

standards.

CBMWD will also advance funds necessary for retrofitting existing potable connections for use with recycled water. CBMWD realizes that the capital costs associated with this retrofitting may be unavailable. To prevent this from hindering the use of recycled water at these sites, CBWMD will retrofit the existing system and allow monthly reimbursement for advanced funds. Quantification of the results of the potential impact of the incentives is estimated below in Table 6.5.6.

Table 6.5.6
Methods to Encourage Recycled Water Use

Actions	Projected Results			
	2020	2025	2030	2035
Financial Incentives	0	0	0	0
Total	0	0	0	0

Note: Units are in acre-feet per year

In addition to the City and CBMWD incentives, MWD also has an extensive incentive program for encouraging the use of recycled water among its member agencies. Please refer to the Metropolitan Water District of Southern California 2020 UWMP for more information.

Urban Water Management Planning Act Requirement:

10633 (g) (Provide a) plan for optimizing the use of recycled water in the supplier's service area, including actions to facilitate the installation of dual distribution systems, to promote recirculating uses, to facilitate the increased use of treated wastewater that meets recycled water standards, and to overcome any obstacles to achieving that increased use.

A recycled water master plan was developed in 2008 for the CBMWD which includes the City's recycled water system. CBMWD assists to oversee the purchase, use, and sale of recycled water to the individual water purveyors in Los Angeles County.

The 2008 Recycled Water Master Plan identifies potential uses for recycled water within the City, as well as many other surrounding cities and water districts. The Plan includes recommendations and suggestions for improvement to the recycled water system. Recommendations were based on cost feasibility, as well as the potential customer demand for recycled water. Due to the low customer demand and high associated costs, recommendations were not made to include the City in the CBMWD's Capital Improvement Plan for expanding the recycled water system. Instead, priority was given to a project with larger potential users: the SWRP. The SWRP is the planned CBMWD system expansion that will complete the loop of the Rio Hondo and Century systems for flow reliability, system pressure, and to aid in chlorination. The ultimate capacity for the combined,

looped systems is projected to be 15,000 AFY. As envisioned, this will consist of approximately 11.4 miles of 30-inch cement-lined and coated steel pipeline to be built from the City of Pico Rivera, through the cities of Montebello, Commerce, and East Los Angeles to the City of Vernon. Construction on the first phase from Pico Rivera to the Montebello Golf Course was completed in the fall of 2011 and several sites have already been connected using approximately 400-500 AFY of the 1,000 AFY of identified demand. Construction of the Phase 2 from Montebello to Vernon will depend on funding, securing a customer base, and other outstanding institutional issues. Refer to the CBMWD's 2020 UWMP Update for further information.

In addition to the CBMWD's programs, the City identified in its 2015 Draft Water Master Plan Update opportunities to use recycled water for irrigation of ornamental turf grass in street medians within its service area. Recycled water produced by the LACSD is already conveyed across the City in a 24-inch trunk main located along the Southern California Railroad Corridor. An analysis of the beneficial locations of recycled water use in medians and estimated cost was prepared in May 2015. From the analysis a total of seven projects were identified that could save the City approximately 26.3 acre-feet annually, and the projects have been included in the recommended capital improvement program. Table 6.5.7 summarizes the City's efforts to expand recycled water use. CBMWD has not allocated additional recycled water supply to the City; however, the City is still reporting the plan for 2026.

Table 6.5.7
Methods to Expand Future Recycled Water Use

☐	Supplier does not plan to expand recycled water use in the future. Supplier will not complete the table below but will provide narrative explanation.
Pg 6-25	Provide page location of narrative in UWMP

Name of Action	Description	Planned Implementation Year	Expected Increase in Recycled Water Use
Add additional rows as needed			
Recycled Water Main Extensions for Turf Medians	Irrigation of ornamental turf grass in street medians (seven projects in total, see Notes).	2026	26
		Total	26

NOTES: The seven irrigation projects provided by 2015 Water Master Plan Draft Update include: P1 - Alondra BLVD, P2 - Somerset / Downey / Paramount / Alondra Garfield, P3 - Somerset / Lakewood, P4 - Rosecrans / Downey / Century, P5 - Rosecrans / Paramount, P6 - Rosecrans / Garfield, P7 - Rosecrans (SCE to LA River).

6.6 FUTURE WATER PROJECTS

Urban Water Management Planning Act Requirement:

10631 (h) (Describe) all water supply projects and water supply programs that may be undertaken by the urban water supplier to meet the total projected water use as established pursuant to subdivision (a) of Section 10635.

In accordance with a recommendation made in the City's 2015 Draft Water Master Plan Update, the City included construction of a new well, Well No. 16, to its capital improvement program to supplement the groundwater supply and allow for the decommissioning and abandonment of Well No. 13. In addition, this will allow the transition of Well No. 14 to a backup facility. As discussed in Section 6.2, Well No. 13 has been experiencing water quality issues and is currently used as backup for Wells 14 and 15. The addition of Well No. 16 will increase the reliability of the City's pumping capacity to ensure full utilization of its groundwater pumping rights. Refer to Table 6.1.1 for a summary of the City's future water supply projects providing quantifiable increases to the City's water supply.

Table 6.6.8
Expected Future Water Supply Projects or Programs

☐	No expected future water supply projects or programs that provide a quantifiable increase to the agency's water supply. Supplier will not complete the table below.
☐	Some or all of the supplier's future water supply projects or programs are not compatible with this table and are described in a narrative format.
Pg. 6-26	Provide page location of narrative in the UWMP

Name of Future Projects or Programs	Joint Project with other agencies?	Description (if needed)	Planned Implementation Year	Planned for Use in Year Type	Expected Increase in Water Supply to Agency
Add additional rows as needed					
Well No. 16	No		TBD	Average Year	507
				Single-Dry Year	507
				Multi-Dry Year	507

NOTES:
- The expected increase in supply was estimated based on the average pumping capacity of the current well configuration (Wells 13, 14, 15)
- Corresponds to WUE Table 6-7R.

7 WATER SERVICE RELIABILITY & DROUGHT RISK ASSESSMENT

7.1 Constraints of Water Sources

Urban Water Management Planning Act Requirement:

CWC 10631(c)(2) For any water source that may not be available at a consistent level of use, given specific legal, environmental, water quality, or climatic factors, describe plans to supplement or replace that source with alternative sources or water demand management measures, to the extent practical

CWC 10634 The plan shall include information, to the extent practical, relating to the quality of existing sources of water available to the supplier over the same five-year increments as described in subdivision (a) of Section 10631, and the manner in which water quality affects water management strategies and supply reliability.

Currently, the only sources of potable water that the City of Paramount (City) utilizes are supplier pumped groundwater from the Central Basin and wholesale distributed water through Central Basin Water District (CBMWD). Additional water supplies are obtained by treating wastewater and using it as recycled water for irrigation purposes only. Although these are deemed reliable, each source has unique challenges to ensure that water will continue to be available. These challenges are shown in Table 7.1.1 and described below.

Table 7.1.1
Factors Resulting in Inconsistence of Water Supply

Water Supply Sources	Legal	Environmental	Water Quality	Climatic	Additional Information
Central Basin Groundwater	✓		✓	✓	NA
CBMWD Wholesale Water			✓		NA
Recycled Water			✓		NA

Central Basin Groundwater

Although it is deemed the most reliable and most cost-effective water supply source, several factors affect the reliability of the Central Basin supply. Despite these factors, the City still considers optimizing the use of groundwater from the Central Basin a priority for the future.

Legal

As the Central Basin is adjudicated, it is subject to legal considerations. The amount of groundwater allowed to be pumped is set at a constant rate by the adjudication agreement included in Appendix G of this plan. Although it is not anticipated that total water supplies from the Central Basin will decrease as a result of the adjudication, it is unlikely that they will increase with increasing demand. Therefore, alternative ways to supplement groundwater must be considered as increased pumping from the Basin will be legally restricted.

Water Quality

Groundwater quality from the Central Basin is discussed in Section 7.1.3 below.

Climatic

Groundwater levels are highly dependent on climate issues such as annual rainfall and average temperature. During dry or wet years, the groundwater levels in the Central Basin are dynamic due to the large number of water districts that use it as either a sole or major source of water. Inconsistency in water levels due to drought is generally a short-term event that can significantly impact the water supply to the City. Currently the CBMWD, in conjunction with the City and its other member agencies, has several preventative measures in place to mitigate the effects a drought may have on the overall water supply. These mitigation measures include maintaining a groundwater recharge system, surplus capacity, and emergency water connections for imported water. For more information on the effects of a drought, see Section 7.2, which identifies the water reliability during a normal year, single dry year, and multiple dry years.

CBMWD Wholesale Water

CBMWD identified that its water supply to the City is considered reliable and sufficient to meet projected demands. However, the reliability of the supply is also dependent on the water quality delivered by the State Water Project (SWP) to the Metropolitan Water District of Southern California (MWD). In general, the SWP quality has been considered good, with delivered water meeting the state threshold requirements. But as seawater intrusion into the Bay-Delta increases, water quality can be diminished. In addition, as water moves through the Bay-Delta, levels of total organic carbon and bromide are likely to increase. Water quality can also be affected by the amount of wastewater that is disposed as this provides a means for the transportation of salts

and pathogens into clean water supplies. To prevent these water quality issues from affecting the overall reliability of supply, water quality analyses are conducted throughout the delivery process and at the water treatment plants to ensure water is safe prior to delivery. Furthermore, state regulatory factors have included biological assessments affecting the amount of water delivered from the Delta to the SWP system to prevent degradation of water quality from the Delta. MWD, CBMWD, and the City are diligent in identifying poor water quality and will act immediately to ensure proper treatment so as to maintain a clean source of potable water.

Water Quality

Each of the City's water sources present its own, unique water quality issues. Issues that may cause concern regarding water quality are described in the subsections below. It should be noted the City of Paramount's 2019 Consumer Confidence Report did not identify any contaminant above the Maximum Contaminant Level (MCL). The following subsections are presented, not to indicate they are the source of current water quality violations in the City's water supply, but instead they are identified as potential issues of concern that should be monitored to ensure a high-quality water supply.

Central Basin Groundwater

Groundwater supplied by the Central Basin has historically met good water quality standards. However, the City has, at times, detected Arsenic and Manganese content above the MCL in City wells, requiring additional treatment to be performed at the well head to prevent distribution of poor-quality water. In addition to City water testing, conducted to ensure water quality is met while contaminant and bacteria presence are at acceptable levels, the CBMWD conducts its own water quality tests and monitoring of wells to ensure that water is acceptable for delivery within its service area as well as its purveyors' service areas.

Arsenic

Arsenic is a toxic chemical that can be found naturally in groundwater. In the United States it is most commonly found in southwest regions and is commonly known to cause skin cancer.

Historically, the arsenic levels in the groundwater at Well No. 13 averaged 15 ppb (parts per billion), which was considered to be acceptable. In 2006, the Federal MCL for arsenic was lowered to 10 ppb. As a result, the City was required to construct additional treatment at Well No. 13 to ensure that arsenic levels would be reduced to a level below the MCL. The new treatment facilities include a sodium bisulfite feed system for iron/manganese treatment; a ferric chloride chemical feed system for arsenic reduction; and pressure filters. Water quality issues regarding high

arsenic content have not been prevalent since the construction of the additional treatment systems.

Manganese

Elevated levels of manganese, exceeding the MCL set by the California Department of Public Health (CDPH) which were updated in 2003 to 0.5 ppm, have been noted at Well No. 13. In response to more stringent arsenic requirements (as described above), the City augmented the treatment system at Well No. 13. As part of this update, the City also included manganese treatment as part of the upgrade to ensure manganese levels will not exceed the MCL. Since the construction, no water quality issues regarding manganese have been noted. This was verified in the 2014.

CBMWD Wholesale Water

The water quality issues associated with the water supply to the City are the same as quality issues experienced by CBMWD, and similar to those experienced by MWD. MWD has identified threats to the water quality of water supplied through the Colorado River and the SWP. MWD reports that increased salinity and chemicals (i.e. chromium VI, etc.) in the water it is supplied with, as a theoretical water quality event, will cause at most a 15% reduction in supply. However, MWD also noted that if concentrations of these contaminants exceed the potable water quality threshold, tactics such as utilizing only small amounts of the affected water and diluting it with potable, processed water would reduce the concentration to treatable and acceptable levels. The MWD has stated that it "anticipates no significant reductions in water supply availability from [the Colorado River, SWP, and local groundwater] sources due to water quality concerns over the study period."

The City realizes the importance of constantly assuring that the water it distributes meets potable water standards. Although there are no water quality issues that immediately threaten the supply to the City's customers, the City maintains knowledge of water quality issues to prevent poor quality water from being distributed. The following are descriptions of the most pertinent issues of concern, due to either historically increasing levels of water salinity or threshold reductions (Chromium VI).

Salinity

Increased salinity in the water received from the Colorado River has required MWD to utilize one of the tactics described above: diluting SWP water with Colorado River water to reduce the overall salinity concentration. Although this has not caused water supply shortages, if salinity levels continue to increase, additional membrane treatment of water from the Colorado River may be

required. This could potentially increase the water purification process time and could result in a reduction in water supply rates.

To prevent a reduction in supply, MWD has established a Salinity Management Policy, which sets the goal of delivering water with less than 500 mg/L of total dissolved solids (TDS). Generally, this issue has only been observed with the Colorado River supply; the SWP has historically had significantly lower salinity levels.

Chromium VI (Hexavalent Chromium)

While currently there is no drinking water standard for Chromium VI, the California Office of environmental Health Hazard Assessment (OEHHA) established a Public Health Goal (PHG) for chromium VI in drinking water. The PHG proposes a goal of 0.02 pbb Chromium VI in drinking water. However, the development of the PHG is indicative of future potential standards for drinking water. MWD utilizes analytical testing to ensure that Chromium VI levels do not exceed the current standard. In the event that the Chromium VI standards are reduced, MWD would not have to change its testing method, as the current minimum threshold for its analytical testing is below the proposed concentration threshold.

MWD records of Chromium VI content reveal, if more stringent goals are implemented, additional treatment of SWP water may be required as levels have historically been noted to exceed the proposed PHG. The PHA released by the California OEHHA in July 2011 states that the PHG of 0.02 ppb is intended to be a “stringent health-protective goal” as opposed to a “maximum ‘safe’ level of chromium 6 in drinking water.” In contrast to SWP water, water from the Colorado River has historically been recorded as generally having undetectable levels of Chromium VI.

Table 7.2 indicates the potential impacts of water quality on the City’s water supply, as identified by CBMWD and MWD.

Table 7.1.2
Water Quality - Current and Projected Water Supply Impacts

Water Source	Description of Condition	2025	2030	2035	2040
Central Basin	No water quality issues expected	0	0	0	0
CBMWD Potable Water	No water quality issues expected	0	0	0	0
CBMWD Recycled Water	No water quality issues expected	0	0	0	0

7.2 Reliability by Type of Year

Urban Water Management Planning Act Requirement:

CWC 10631(c)(1) Describe the reliability of the water supply and vunlerability to seasonal or climatic shortage, to the extent practicable, and provide data for each of the following:

(A) An average water year,

(B) A single dry water year,

(C) Multiple dry water years.

All potable water supplies are pumped from the Central Basin or provided through the CBMWD as part of MWD and the SWP. The groundwater supply is available based on the ability of the City to pump the fully allotted amount through the Central Basin adjudication. Since the additional purchased supply is not directly obtained by the City, the determination of reliability will largely be based on CBMWD and MWD analyses to provide a consistent water supply to the City during normal, single dry, and multiple dry years. During these years, the City is committed to reducing water demand during times of drought in order to conserve water and improve reliability for future water supplies. For the purpose of this Plan, the Department of Water Resources defines average, single-dry, and multiple dry years as follows.

Average Year: A year, or an averaged range of years, that most closely represents the median water supply available to the agency.

Single-Dry Year: The year that represents the lowest water supply available to the agency.

Multiple Dry Years: The period that represents the lowest average water supply availability to the agency for a consecutive multiple year period (three years or more).

Table 7.3 identifies the normal, single dry, and multiple dry water years chosen to represent the water supply from CBMWD as well as the percentage/volume of supply that was available for public use. These percentage values do not represent additional supplies through surplus storage. Instead, they demonstrate the water available to be added to the supply system based on the hydrology of those years.

Climate Change:

According to the California's Forth Climate Change Assessment, the City, and the greater Los Angeles Area, should consider increases in temperature, reduction in precipitation, increased fires, more frequent droughts, and changes in air quality, among others, as potential impacts of

climate change. Each of these impacts has the potential to develop into a water shortage scenario for the community. While direct impacts to the City are vague based on current reports, the City recognizes that continued efforts to increase water use efficiency are needed to mitigate the impacts of climate change. The following tables demonstrate the reliable of the City' water supply through multiple dry-year scenarios. It is likely, based on current information, that the likelihood of these scenarios will increase in the future.

Table 7.2.1
Bases of Water Year Data

Year Type	Base Year	Available supplies if year type repeats	
		Volume Available (AFY)	% of Avg Supply
Average Year	2010	7543	100%
Single-Dry Year	2005	7605	101%
Multiple-Dry Years 1st Year	2005	7605	101%
Multiple-Dry Years 2nd Year	2006	7425	98%
Multiple-Dry Years 3rd Year	2007	7493	99%
Multiple-Dry Years 4th Year	2008	7482	99%
Multiple-Dry Years 5th Year	2009	7481	99%

AFY = acre-feet per year.
Note: Coordinated with WUE Table 7-1 R

In the single dry water year, demand increased and therefore more water was supplied to meet the demand due to increased temperatures, evapotranspiration rates, and a longer growing season. Throughout these years, the supply available from the Central Basin was assumed to remain consistent, regardless of the water years. Although this results in using more water than is naturally replenished during these years, water reserves are available to provide a reliable source of water in the event of another single dry year with similar hydrology. The only varying source is water available through the MWD. However, the MWD 2020 UWMP estimated that it would be able to meet all demands during normal, single dry, and multiple dry year scenarios in the next 25 years.

7.3 Supply and Demand Assessment

Urban Water Management Planning Act Requirement:

CWC 10635 Every urban water supplier shall include, as part of its urban water management plan, an assessment of the reliability of its water service to its customers during normal, dry, and multiple dry water years. This water supply and demand assessment shall compare the total water supply sources available to the water supplier with the total projected water use over the next 20 years, in five-year increments, for a normal water year, a single dry year, and multiple dry water years. The water service reliability assessment shall be based upon the information compiled pursuant to Section 10631, including available data from state, regional, or local agency population projections within the service area of the urban water supplier.

Tables 7.4 through 7.6, on the following pages, compare the total supply and demand as identified in Chapters 5 and 6 for normal, single dry, and multiple dry years. It can be seen that the supply available to the City, as estimated based on groundwater pumping and as provided in the CBMWD and MWD 2015 UWMPs, is less than the total demand for the year 2035. The City is committed to water conservation in normal, single dry and multiple dry years to help preserve precious water reserves and supplies.

The data provided for the normal, single dry, and multiple dry year scenarios is provided in the supply portion of the CBMWD 2015 Urban Water Management Plan. The plan identifies that during a single dry year scenario, demand may increase by approximately 0.2% over a normal year. CBMWD identified that supply was sufficient in a single dry year to meet this increased demand. During a multiple dry year, it was identified that the average demand may increase by 0.6%. However, these demand increases may not actually be seen during multiple dry year scenarios due to conservation measures that will be enacted. Conservation measures may offset the predicted increase in demand over a multiple dry year period. CBMWD did not identify any reliability issues with delivering water during a single or multiple dry year period and identified that supply would be sufficient to meet demand.

It should be noted the following table outline reliability estimates for potable water during normal, single-dry, and multiple-dry year scenario. The values below do not account for reclaimed water which is expected to increase significantly due to developments at the World Energy facility. The project intends to obtain an additional 2,507AF of reclaimed water from CBMWD. Although unaccounted for in the estimates below, CBMWD has provided a statement to the City that it is fully capable of providing the additional reclaimed water for the facility.

Table 7.3.1 Supply and Demand Comparison — Normal Year				
	2025	2030	2035	2040
Supply Totals	7,876	7,902	7,902	7,902
Demand Totals	5,955	6,074	6,194	6,320
Difference	1,921	1,828	1,708	1,582

Units are in acre-feet per year.
Note: Coordinated with WUE Table 7-3 R

During a normal year, it can be seen that the City will pump the water available through the City's allocated pumping rights. The water demand surpasses water supply in 2035 by 142 acre-feet per year; this difference will be supplied as necessary through CBMWD.

Table 7.3.2 Supply and Demand Comparison — Single Dry Year				
	2025	2030	2035	2040
Supply Totals	7,955	7,981	7,981	7,981
Demand Totals	5,967	6,086	6,206	6,333
Difference	1,988	1,895	1,775	1,648

Units are in acre-feet per year.

The demand in a single dry year was estimated to increase by approximately 0.2%. During a single dry year, CBMWD and the City expect to have supplies available that exceed this demand increase, except for the year of 2035. In the event this water shortage, measures outlined in the Water Shortage Contingency Plan (described in more detail in Chapter 8) will be implemented to prevent overdraft conditions, as well as preserve the water supply.

Table 7.3.4 Supply and Demand Comparison — Multiple Dry-Year Events					
		2025	2030	2035	2040
Multiple-dry year first year supply	**Supply Totals**	7,955	7,981	7,981	7,981
	Demand Totals	5,967	6,086	6,206	6,333
	Difference	2,028	1,895	1,775	1,648
Multiple-dry year second year supply	**Supply Totals**	7,718	7,493	7,493	7,493
	Demand Totals	6,325	6,452	6,578	6,713
	Difference	1,393	1041	915	780
Multiple-dry year third year supply	**Supply Totals**	7,797	7,823	7,823	7,823
	Demand Totals	6,705	6,838	6,973	7,116
	Difference	1092	985	850	707
Multiple-dry year fourth year supply	**Supply Totals**	7,797	7,823	7,823	7,823
	Demand Totals	7,107	7,249	7,391	7,543
	Difference	690	574	432	280
	Supply Totals	7,797	7,823	7,823	7,823

Multiple-dry year fifth year supply	**Demand Totals**	7,533	7,683	7,835	7,995
	Difference	264	140	(-12)	(-172)

Units are in acre-feet per year

CBMWD anticipates a supply that could exceed water demand in a multiple dry year period. However, in stages of more severe water shortages, the City may ration supplies as necessary, and implement water conservation measures resulting in up to a 50% water use reduction. This will be implemented in situations when water supply is projected to reach dangerously low levels, and an emergency situation is imminent.

7.4 Regional Supply Reliability

Urban Water Management Planning Act Requirement:

CWC 10620(f) An urban water supplier shall describe in the plan water management tools and options used by that entity that will maximize resources and minimize the need to import water from other regions.

Water supply reliability includes the pumped groundwater from the Central Basin, the availability of the water purchased through the CBMWD and the distribution system that makes up the City's recycled water supply. Each of these sources is considered to be a reliable water supply to the City. Recently, the City constructed a new well to supplement its water supply and reduce its dependence on imported water from the CBMWD. Well No. 15 provides the capability for the City to pump the full allotted amount through the adjudication agreement.

Since a portion of the City's water supply is provided by CBMWD, which in turn is provided through the MWD and the SWP, the reliability analysis for this water source will be heavily dependent on the reliability analyses of these agencies. Although the City is dependent on these sources to provide a reliable water supply, the City also works with the CBMWD to ensure water reliability in the future. As it is not possible to support the entire water demand through groundwater, because of the adjudication agreement, the City will continue to work with CBMWD to ensure that the necessary improvements are made to ensure a high quality and reliable source of water.

7.4 Drought Risk Assessment

Urban Water Management Planning Act Requirement:

CWC 10635(b) . Every urban water supplier shall include, as part of its urban water management plan, a drought risk assessment for its water service to its customers as part of information considered in developing the demand management measures and water supply projects and programs to be included in the urban water management plan. The urban water supplier may conduct an interim update or updates to this drought risk assessment within the five-year cycle of its urban water management plan update.

In accordance with the water code, the City has prepared a Drought Risk Assessment (DRA) in accordance with the water code. The City estimated sufficient water supply should be available to meet demands based on reported additional supplies from CBMWD through MWD and anticipated water conservation efforts set forth in the Water Shortage Contingency Plan and City Ordinance 1050 for Water Conservation. The following section outline the specific requirements of the water code and explain how the City meets compliance.

Urban Water Management Planning Act Requirement:

CWC 10635(b)(1) (1) A description of the data, methodology, and basis for one or more supply shortage conditions that are necessary to conduct a drought risk assessment for a drought period that lasts five consecutive water years, starting from the year following when the assessment is conducted.

Data for the DRA was based on current and historic water demand records for the City and estimated using the same tools used to complete the update to the Urban Water Management Plan. The City population was estimated using linear percentage increases based on Department of Finance E-1 projections between pillar years (2020-2025). Additionally, water supply was calculated utilizing the same methodology used to determine the multiple dry year scenario. Working with historical water supply values and then applying that percent to the current water supply over successive years to develop a multiple dry-year scenario beginning in the current planning year. The values reflect what supply and demand might look like if the City entered into a multiple dry-year scenario beginning in the current year.

Urban Water Management Planning Act Requirement:

CWC 10635(b)(3) A comparison of the total water supply sources available to the water supplier with the total projected water use for the drought period.

The following tables outline the projected water supply and demand throughout the drought scenario. These tables were developed utilizing DWR's Optional Planning Tool and utilizes the methodologies included in the Urban Water Management Plan Guidebook.

As noted above, CBMWD has stated it can provide sufficient water for the foreseeable future even in multiple dry-year conditions. So, for the purpose of these tables, and deficiencies were met assuming supplemental water could be provided by CBMWD. While CBMWD is available to meet consumer demands, it is more economically sustainable for the City to implement the water conservation measures outlined in City Ordinance 1050 and the WSCP to avoid the need for supplemental water.

Table 7.3.5
Drought Risk Assessment Table

2021	Total
Total Water Use	5,448
Total Water Supplies	5,501
Surplus/Shortfall w/o WSCP Action	53
Planed WCSP Actions	
WSCP -supply augmentation benefit	None
WSCP- use reduction savings benefit	None
Revises Surplus/Shortfall	53
Resulting % Use Reduction from WSCP action	0%
2022	Total
Total Water Use	5,469
Total Water Supplies	5,338
Surplus/Shortfall w/o WSCP Action	-131
Planed WCSP Actions	
WSCP -supply augmentation benefit	131
WSCP- use reduction savings benefit	
Revises Surplus/Shortfall	0
Resulting % Use Reduction from WSCP action	0%

Table 7.3.5 Drought Risk Assessment Table	
2023	Total
Total Water Use	5,491
Total Water Supplies	5,391
Surplus/Shortfall w/o WSCP Action	-100
Planed WCSP Actions	
WSCP -supply augmentation benefit	100
WSCP- use reduction savings benefit	
Revises Surplus/Shortfall	0
Resulting % Use Reduction from WSCP action	0%
2024	Total
Total Water Use	5,511
Total Water Supplies	5,391
Surplus/Shortfall w/o WSCP Action	-120
Planed WCSP Actions	
WSCP -supply augmentation benefit	120
WSCP- use reduction savings benefit	None
Revises Surplus/Shortfall	0
Resulting % Use Reduction from WSCP action	0%
2025	Total
Total Water Use	5,531
Total Water Supplies	5,341
Surplus/Shortfall w/o WSCP Action	-190
Planed WCSP Actions	
WSCP -supply augmentation benefit	190
WSCP- use reduction savings benefit	Variable
Revises Surplus/Shortfall	0
Resulting % Use Reduction from WSCP action	0%

Note: Units are in Acre-Feet
Noe: Coordinates with WUE Table 7-5

Urban Water Management Planning Act Requirement:

CWC 10635(b)(4) Considerations of the historical drought hydrology, plausible changes on projected supplies and demands under climate change conditions, anticipated regulatory changes, and other locally applicable criteria.

Table 4.1.1 illustrates gross and per capita water use for the City for many years including FY 2012-2017. These years framed a historic drought in California which inspired the changed to the water code which necessitate the development of the DRA. During this period, the City successfully supplied water to the community. This was achieved though significant improvements in water conservation measures and public outreach. As the table demonstrates, the City has continued to improve its water conservation efforts, easily surpassing water use goals for 2020. With water usage per capita values continuing to improve and reliable supplemental water from CBMWD at hand, the City is confident in its ability to continue to provide reliable water service even if drought condition, such as the 2012 drought, were to reoccur.

At the time of this report, there are no recognized significant impacts due to climate change which will impede the City's ability to provide water service. Furthermore, DWR efforts to improve water use efficiency through reduced water losses will only improve resiliency as the City strives for compliance.

8 WATER SHORTAGE CONTIGENCY PLAN

8.1 Water Supply Reliability Analysis

Currently, the only sources of potable water that the City of Paramount (City) utilizes are supplier pumped groundwater from the Central Basin and wholesale distributed water through Central Basin Water District (CBMWD). Ground water has been deemed the most reliable and cost - effective water suppler source and the City intends to prioritize optimizing the use of groundwater for the future.

Chapter 7 of the Urban Water Management Plan (UWMP) goes into detail about the anticipated water supply and demand over the next twenty years. Between wholesale water provided by the CBMWD and adjudicated groundwater pumping rights, the water supply is considered to be reliable over the next twenty years in normal, dry, and multiple-dry year scenarios. Below are the tables from Chapter 7 demonstrating the water supply/demand reliability estimates over the next twenty years.

Table 8.1.1
Supply and Demand Comparison — Normal Year

	2025	2030	2035	2040
Supply Totals	7,876	7,902	7,902	7,902
Demand Totals	5,955	6,074	6,194	6,320
Difference	1,921	1,828	1,708	1,582

Units are in acre-feet per year.
Note: Coordinated with WUE Table 7-3 R

During a normal year, it can be seen that the City will pump the water available through the City's allocated pumping rights. The water demand surpasses water supply in 2040 by 1,582 acre-feet per year; this difference will be supplied as necessary through CBMWD.

Table 7.3.2 Supply and Demand Comparison — Single Dry Year				
	2025	2030	2035	2040
Supply Totals	7,955	7,981	7,981	7,981
Demand Totals	5,967	6,086	6,206	6,333
Difference	1,988	1,895	1,775	1,648

Units are in acre-feet per year.

The demand in a single dry year was estimated to increase by approximately 0.2%. During a single dry year, CBMWD and the City expect to have supplies available that exceed this demand increase, except for the year of 2040. In the event this water shortage, measures outlined in the Water Shortage Contingency Plan will be implemented to prevent overdraft conditions, as well as preserve the water supply.

Table 7.3.4 Supply and Demand Comparison — Multiple Dry-Year Events					
		2025	2030	2035	2040
Multiple-dry year first year supply	**Supply Totals**	7,955	7,981	7,981	7,981
	Demand Totals	5,967	6,086	6,206	6,333
	Difference	2,028	1,895	1,775	1,648
Multiple-dry year second year supply	**Supply Totals**	7,718	7,493	7,493	7,493
	Demand Totals	6,325	6,452	6,578	6,713
	Difference	1,393	1041	915	780
Multiple-dry year third year supply	**Supply Totals**	7,797	7,823	7,823	7,823
	Demand Totals	6,705	6,838	6,973	7,116
	Difference	1092	985	850	707
Multiple-dry year fourth year supply	**Supply Totals**	7,797	7,823	7,823	7,823
	Demand Totals	7,107	7,249	7,391	7,543
	Difference	690	574	432	280
Multiple-dry year fifth year supply	**Supply Totals**	7,797	7,823	7,823	7,823
	Demand Totals	7,533	7,683	7,835	7,995
	Difference	264	140	(-12)	(-172)

Units are in acre-feet per year

CBMWD anticipates a supply that could exceed water demand in a multiple dry year period. However, in stages of more severe water shortages, the City may ration supplies as necessary,

and implement water conservation measures resulting in up to a 50% water use reduction. This will be implemented in situations when water supply is projected to reach dangerously low levels, and an emergency situation is imminent.

8.2 Annual Water Supply and Demand Assessment Procedures

As a water supplier, the City must prepare an Annual Assessment. The Annual Assessment is a determination of the near-term outlook for supplies and demands and how a perceived shortage may relate to WSCP shortage stage response actions in the current calendar year; this determination is based on known circumstances and information available to the City at the time o the analysis. Starting in 2022, the Annual Assessment will be due by July 1 of every year, as indicated by CWC Section 10632.1.

The Annual Assessment will be primarily based on the City's ongoing supply-demand tracking process which is exhibited in monthly report by water personnel. These monthly analyses provide key information for Metropolitan to manage resources to meet a range of estimated demands and adjust to changing conditions throughout the year.

By June, Water personnel will present a completed Annual Assessment for approval by the City Council for approval of Annual Assessment determinations. This presentation will include a request that the approval of the Annual Assessment determination also appropriately triggers any recommended specific shortage response actions resulting from the assessment. Upon approval, Metropolitan staff will then formally submit the Annual Assessment to the Department of Water Resources (DWR) by July 1 each year.

Assessment Methodology

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

- Characterization of the current year and dry year scenarios bases on best-available data,
- Estimation of available core supplies, and
- Estimate of projected demands.

Together, these three criteria provide the necessary information to calculate shortage percentages by dividing the difference between total core supplies and unconstrained demand by total unconstrained demand, under current year and dry year scenarios.

8.3 Six Standard Water Shortage Stages

The City of Paramount (City) developed a six-level rationing plan to be implemented when the City experiences a shortage in the water supply. According to the plan, the City Council, upon the request of the City Manager and General Manager, is given the authority to declare a stage of action and implement reduction measures. Table 8.3.1 below provides an outline of each phase and the associated percentage of water supply reduction.

Table 8.3.1
Stages of Water Shortage Contingency Planning

Shortage Level	Stage (Ord. 1050)	Percent Supply Reduction	Water Supply Condition
Shortage Level 1	Stage I: Moderate (a)	0-10%	A Level I Water Supply Shortage exists when the City Council determines, in its sole discretion, that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists and a 10% consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions.
Shortage Level 2	Stage I: Moderate (b)	11-20%	A Level II Water Supply Shortage exists when the City Council determines, in its sole discretion, that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists and a 20% consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions.

Table 8.3.1
Stages of Water Shortage Contingency Planning

Shortage Level	Stage (Ord. 1050)	Percent Supply Reduction	Water Supply Condition
Shortage Level 3	Stage II: Severe (a)	21-30%	A Level III Water Supply Shortage exists when the City Council declares, in its sole discretion, that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists and a 30% consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions.
Shortage Level 4	Stage II: Severe (b)	31-40%	A Level IV Water Supply Shortage exists when the City Council declares, in its sole discretion, that due to drought or other water supply conditions, a water supply shortage or threatened shortage exists and a 40% consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions.
Shortage Level 5	Stage III: Critical	41-50%	A Level V Water Supply Shortage is referred to as a Water Shortage Emergency. A Level V condition exists when the City Council declares, in its sole discretion, a water shortage emergency and notifies its residents and businesses that a 50% reduction in consumer demand reduction is necessary to make more efficient use of water and appropriately respond to existing water conditions

Table 8.3.1
Stages of Water Shortage Contingency Planning

Shortage Level	Stage (Ord. 1050)	Percent Supply Reduction	Water Supply Condition
Shortage Level 6	Stage IV: Emergency	+51%	A Level V Water Supply Shortage is referred to as a Water Shortage Emergency. A Level V condition exists when the City Council declares, in its sole discretion, a water shortage emergency and notifies its residents and businesses that a 50% reduction in consumer demand is necessary to maintain sufficient water supplies for public health and safety, pursuant to Water Code Section 350 et seq.

8.4 Shortage Response Actions

In the event of a significant reduction of water supply, the City has six stages of actions to take and policies to implement in order to minimize the impacts of water shortage, prepare for an increase in shortage, and attempt to conserve water to prevent further shortages. Table 8.4.1 on the following page provides an overview of the mandatory prohibitions and the consumption reduction methods the City will implement to compensate for a water shortage of up to 50%.

Table 8.4.1
Restrictions and Prohibitions on End Uses

Stage	Restrictions and Prohibitions of End Users	Penalty, Charge, or Other Enforcement
1	Landscape - Limit landscape irrigation to specific days	Yes
1	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Yes
1	Landscape - Restrict or prohibit runoff from landscape irrigation	Yes
1	Other - Prohibit use of potable water for washing hard surfaces	Yes
2	Water Features - Restrict water use for decorative water features, such as fountains	Yes
2	CII - Restaurants may only serve water upon request	Yes
2	Other - Prohibit use of potable water for construction and dust control	Yes
3	Landscape – Increased limit for landscape irrigation to specific days	Yes
3	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Yes
3	Water Features - Restrict water use for decorative water features, such as fountains	Yes
4	Other - Prohibit vehicle washing except at facilities using recycled or recirculating water	Yes
4	Landscape - Other landscape restriction or prohibition	Yes
4	Main line flushing is allowed for emergency purposes only	Yes
5	Other - Customers must repair leaks, breaks, and malfunctions in a timely manner	Yes
6	Additional prohibited uses as determined by the City Council.	Yes

Level 1 and 2 Water Supply Shortage (0% - 20% reduction)

The following mandatory water conservation requirements apply during such time that the Stage 1 Water Supply Shortage is in effect:

***Limits on Watering Days*:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 3 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 2 days per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.

Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within seventy two (72) hours of observation and/or notification by the City.

No Excessive Water Flow or Run-Off: Watering or irrigation of any lawn, landscape or other vegetated area in a manner that causes or allows excessive water flow or run-off onto an adjoining sidewalk, driveway, street, alley, gutter or ditch must be must be repaired within 5 days of observation and/or notification by the City.

No Washing Down Hard or Paved Surfaces: Washing down hard or paved surfaces, including but not limited to sidewalks, walkways, driveways, parking areas, tennis courts, patios or alleys is prohibited except when necessary to alleviate safety or sanitary hazards and only by use of a hand-held bucket or similar container, a low-volume high pressure cleaning machine equipped to recycle any water used or a low volume high pressure water broom.

Re-Circulating Water Required for Water Fountains and Decorative Water Features: Operating a water fountain or other decorative water feature that does not use re-circulating water is prohibited.

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

***Drinking Water Served Upon Request Only*:** Restaurants are prohibited from providing drinking water to any person unless expressly requested by that person.

***Other Prohibited Uses*:**

- Use only recycled water for construction site dust control, consolidation of backfill.

- The City Council may implement other prohibited water uses as determined by the City after notice to customers.

Level 3 and 4 Water Supply Shortage (21% - 40% reduction).

The following mandatory water conservation requirements, in addition to the Stage 1 actions, apply during such time that the Stage 2 Water Supply Shortage is in effect:

***Limits on Watering*:** Watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to 2 days per week. During the months of November through March, watering or irrigation of lawn, landscape or other vegetated area with potable water is limited to no more than 1 day per week. This provision does not apply to landscape irrigation systems that exclusively use very low-flow drip type irrigation systems when no emitter produces more than 2 gallons of water per hour. This provision does not apply to use of a hand-held bucket or similar container, a hand-held hose equipped with a positive self-closing water shut-off device, or for very short periods for the express purpose of adjusting or repairing an irrigation system.

Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within forty eight (48) hours of observation and/or notification by the City.

Other Prohibited Uses:

- No filling, cleaning and/or refilling of decorative fountains, ornamental lakes or ponds except to the extent needed to sustain aquatic life, provided that such animals have been actively managed within the water feature prior to declaration of this supply shortage stage.
- Residential car washing prohibited. Use car washes available with water recycling systems.
- The filling or topping off of any new or existing residential pools or outdoor spas is prohibited.
- Planting of new turf grass is prohibited.
- Outdoor evaporative mist coolers are prohibited.
- Main line flushing is allowed for emergency purposes only.
- The City may implement other prohibited water uses as determined by the City Council, after notice to Customers.

Level 5 and6 Water Supply Shortage – Emergency Condition (Greater than 41% reduction)

The following mandatory water conservation requirements, in addition to Stage 1 and Stage 2 actions, apply during such time that the Stage 3 Water Supply Shortage is in effect:

No Watering or Irrigating: Watering or irrigating of lawn, landscape or other vegetated area with potable water is restricted in accordance with allotments as set forth by the City during a Stage 3 Water Supply Shortage. This restriction does not apply to the use of recycled water or to the following categories of use:

- Maintenance of existing landscape necessary for fire protection;
- Maintenance of existing landscape for soil erosion control;
- Maintenance of plant materials identified to be rare or essential to the well-being of protected species;
- Maintenance of landscape within active public parks and playing fields, daycare centers, golf course greens, and school grounds, provided that such irrigation does not exceed 2 days per week;
- Actively irrigated environmental mitigation projects.

Obligation to Fix Leaks, Breaks or Malfunctions: All leaks, breaks, or other malfunctions in the water user's plumbing, distribution, or irrigation system must be remedied within twenty four (24) hours of observation and/or notification by the City.

Other Prohibited Uses: The City may implement other prohibited water uses as determined by the City Council, after notifying customers.

Shortage Response Action Effectiveness

Efficacy of demand reduction efforts is difficult to estimate or predict, but water savings are a function of the extent to which public information campaigns reach water users and the degree of consumer response to those messages. Consistent with the Communications Plan in the following section , anticipated shortages will involve an appropriately sized outreach campaign to address the targeted demand reduction, which depends on the combined effectiveness of other shortage response actions.

As shown in the following table, reduction responses are designed to reduce demands up to approximately 50% of water demands. This WSCP contains six levels at which water reduction responses will be applied to achieve appropriate levels of use reduction. Table 8.4.1 gives examples of estimated savings by each level using a hypothetical base demand of 5,427 AF.

Actual reductions and base demands are based on a formula that includes various factors such as actual local supply production, population growth, and conservation.

Water Shortage Level	Approximate Percent Reduction	Example Base Demand	Estimated Demand Reduction
1	10%	5427 AF	543 AF
2	20%		1,085 AF
3	30%		1,628 AF
4	40%		2,171 AF
5	50%		2,714 AF
6	+50%*		2,985 AF

Note: 55% used for estimation purposes

Catastrophic Supply Interruptions

Catastrophic failures that put the water supply at risk include fires and earthquakes that could damage the infrastructure of the water distribution system. In the event of a catastrophic event that prevents the City from obtaining water for distribution, the Central Basin Municipal Water District (CBMWD) implements actions and methods to continue supplying water to customers of its member agencies. Water reserves are available to the Metropolitan Water District of Southern California (MWD) through Diamond Lake, as well as other surface reservoirs, and it is estimated that MWD could provide full supply for up to six (6) months for all of its service areas following a catastrophic event that disrupts the supply of water. In addition, methods to ensure that water is continually supplied to the customers include stockpiling emergency pipeline repair materials and coordinating with the California Emergency Management Agency (Cal EMA) and Emergency Operations Center (EOC) in the event of a catastrophic disruption of supply.

Any effect seen by the CBMWD during a catastrophic event would impact the water supply to the City. As a result, the City is subject to the actions and rationing of CBMWD. During any kind of catastrophic event that disrupts the water supply, including a regional power outage or an earthquake, the City, in conjunction, with CBMWD and MWD are prepared to continue providing a reliable source of water.

Regional Power Outage

The City has identified the possibility of a regional power outage and its effect on the water supply. In the event of a regional power outage, the City has backup generators available to ensure that water pumping continues through the wells and pumping stations. In addition, to ensure the imported water supply is made available, MWD has backup generation at its facilities, as well as

the ability to employ gravitational flow from regional reservoirs such as Lake Mathews, Castaic Lake, and Silverwood Lake. Mobile generators are also available as needed.

Earthquake

In the event of a catastrophic earthquake, the City can coordinate with MWD and CBMWD to ensure that any damage lines are repaired as necessary to continue distributing water. In this event, MWD would activate its Emergency Operation Center (EOC) to quickly respond to emergencies and provide emergency services to its customers. The goal of the EOC is to identify leaks and other weaknesses in the system following a catastrophic earthquake, and to quickly isolate the problem in order to reduce wasted water and provide a potable water supply to the population.

With population growth, energy shortages, earthquakes, and the threat of terrorism experienced by California; maintaining the gentle balance between water supply and demand is a complicated task that requires planning and forethought. In the event that a water shortage occurs, simple measures can be implemented to conserve the water supply at a public level. Below, stages are discussed during which various conservation measures will be imposed by the City and CBMWD.

8.5 Communication Protocols

Effectual reduction of water usage begins with effectual communication; both with the public and heads of City management. Water personnel are responsible for communicating increasing water shortage conditions and educating both the public and City management about the necessity and way to conserve limited water supplies. In additional, Water personnel will collaborate with CBMWD and the Metropolitan Water District to improve water reliably and infrastructure. Water personnel will strive to;

- Motivate the public to:
    - Increase conservation.
    - Follow voluntary or mandatory water use guidelines.
    - Participate in water-saving incentive programs.
- Raise awareness about:
    - Water shortage and/or drought conditions
    - Water sources, supplies, and reserves.
    - Local, regional, and state regulations
- Educate the public about:
    - Water supply reliability

  - Water infrastructure and delivery
  - Water quality
- Prepare City Management for:
  - Varying water supply conditions
  - Escalating supply shortage levels

Standard communication

Conservation as a way of life remains central to messaging during normal supply conditions. Regional rebate programs, indoor and outdoor water use efficiency, investments to maintain infrastructure, emergency preparedness, local supply programs, water quality, and regional supply reliability are among some of the themes that make up normal supply period's communications mix to encourage ongoing conservation actions. Below is a snapshot of the various strategies involved:

- Social Media
- City Website
- Community Events
- Education Outreach
- Business Outreach

8.6 Compliance and Enforcement

In the event of a water supply shortage, violators can face a maximum fine of $1,000 or imprisonment for no more than 30 days. Table 8.3 describes the penalties associated with single and recurring violations which are outlined in the ordinance. This includes a first warning and subsequent fines increasing from $100. On the fifth violation, a notice of intent to install a flow restrictor, with the financial burden of the installation of a flow restrictor lying on the suspected violator of the ordinance, will be implemented.

Table 8.3.1
Penalties and Charges

Violation	Stage 1 Penalty or Charge	Stages 2 & 3 Penalty or Charge
First Violation	Written courtesy door hanger describing the violation and deliver a copy of this ordinance by mail	Fine not to exceed one hundred dollars ($100.00)
Second Violation	Fine not to exceed one hundred dollars ($100.00)	Fine not to exceed two hundred dollars ($200.00)
Third Violation	Fine not to exceed one hundred and fifty dollars ($150.00).	Fine not to exceed two hundred fifty dollars ($250.00)
Fourth Violation	Fine not to exceed two hundred dollars ($200.00)	Fine not to exceed two hundred fifty dollars ($250.00)
Fifth Violation	Fine not to exceed two hundred and fifty dollars ($250.00) and the City may install a Flow Restrictor with the financial burden of the Flow Restrictor lying on the suspected violator	Fine not to exceed five hundred dollars ($500.00) and the City may install a Flow Restrictor with the financial burden of the Flow Restrictor lying on the suspected violator

8.7 Legal Authorities

California Water Code Section 350 et seq. authorizes any public entity to declare a water shortage emergency and, upon declaration of that emergency, adopt regulations and restrictions on the delivery and consumption of water in order to conserve water resources during the period of the emergency and until the supply of water available for distribution by the suppliers has been replenished or augmented. For the City, the City Council, along with the City manager, has the ability to declare a state of water shortage and enforce response actions appropriate to the scenario. City Ordinance 1050 lays out the City's plan for implementing reduction measures depending on the severity of the shortage. In 2020, the water code was updated mandating additional water shortage levels be added through the development of this Water Shortage Contingency Plan. This plan seeks to build off the existing ordinance, adding the additional measures to meet Water Code 10635.

8.8 Financial Consequences of WSCP Activation

The City purchases imported water from CBMWD at a two-tiered rate structure. This rate structure promotes water conservation and regional supply reliability. The City is committed to a voluntary purchase agreement with CBMWD, which outlines the amount of water to be purchased at a Tier 1 rate and the cost of the Tier 2 rate for water purchases that exceed the Tier 1 allotment.

In order to further promote water conservation and supply reliability, the City has adopted a similar rate structure for its customers. The City utilizes a two-tier structure for each customer account category. The City's water rate schedule is updated on a yearly basis. See the City's website for water current rates. Note that 1 unit is equivalent to 100 cubic feet or 748 gallons.

Variation in the amount of revenues is already part of the City's financial planning. Revenues vary according to weather patterns and the availability of water supplies. In dry years, local demands increase, and the City may receive higher than anticipated revenues due to increased sales volumes. In contrast, in wet years, demands decrease, and revenues drop due to lower sales volumes. Such revenue surpluses and shortages could cause instability in water rates. To mitigate this risk, the City maintains financial reserves, with a minimum and target balance, to stabilize water rates during times of reduced water sales. The reserves hold revenues collected during times of high-water sales and are used to offset the need for revenues during times of low sales. The City's practice of using reserves to buffer unexpected increases or decreases in budgeted revenue also applies to unexpected expenditure increases or decreases resulting from shortage responses.

8.9 Monitoring and Reporting

Consistent with California Governor's Executive Order B-29-25, the City is currently monitoring and comparing monthly consumption and production rates to the same months in 2013 in order to determine levels of water usage reduction. These rates rely on groundwater pumping and water purchase transaction records as well as end user meter readings to determine water quantities. Should water shortage conditions remain, the City will continue to use these methods to document and analyze measurable progress in water savings against previous years.

8.10 WSCP Refinement Procedures

The WSCP will be periodically re-evaluated 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. The WSCP will be revised and updated during the UWMP update cycle to incorporate updated and new information. For example, actions that are no longer applicable for reasons such as program expiration will be removed. However, if revisions to the WSCP are warranted before the UWMP is updated, the WSCP will be updated outside of the UWMP update cycle. In the course of preparing the Annual Assessment each year, City staff will routinely consider the functionality the overall WSCP and will prepare recommendations for the City Council if changes are found to be needed.

8.11 Special Water Feature Distinction

The City did not identify any special water features.

8.12 Plan Adoption, Submittal, and Availability

As was done for the 2020 Urban Water Management Plan update, the WSCP will be made available during update years to the public and neighboring agencies. Drafts will be advertised on the City website and by email to interested stakeholders. Each June, the City will hold a public hearing to answer questions regarding the plan and for the City Council to approve the WSCP prior to submission to the Department of Water Resources.

9 DEMAND MANAGEMENT MEASURES

9.1 INTRODUCTION

Urban Water Management Planning Act Requirement:

CWC 10631 (f)(A)…The narrative shall describe the water demand management measure that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

(B) The narrative pursuant to this paragraph shall include descriptions of the following water demand management measures: (i) Water waste prevention ordinances. (ii) Metering. (iii) Conservation pricing. (iv) Public education and outreach. (v) Programs to assess and manage distribution system real loss. (vi) Water Conservation program coordination and staffing support. (vii) Other demand management measures that have a significant impact on water use as measured in gallons per capita per day, including innovative measures, if implemented.

The City of Paramount (City) works with the Central Basin Municipal Water District (CBMWD) to implement water conservation techniques to reduce the total demand of water throughout the City and CBMWD. Together, the City and CBMWD implement the seven (7) required Demand Management Measures (DMMs) within the City. CBMWD is an early signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding (MOU) regarding Urban Water Conservation in California. CUWCC represents a diverse group of water supply agencies dedicated to establishing guidelines toward implementing conservation measures and managing supply demands. The following table summarizes the Best Management Practices (BMPs)/DMMs.

Table 9.1.1
CUWCC BMP Organization and Names and UWMP DMMs

Category	BMP #	BMP Name	DMM #	DMM Name
BMP 1: Utility Operations	1.1	Operations Practices	5	Programs to Assess and Manage Distribution System Real Loss
	1.2	Water Loss Control	1	Water Waste Prevention Ordinances
	1.3	Metering with Commodity Rates	2	Metering
	1.4	Retail Conservation Pricing	3	Conservation Pricing
BMP 2: Public Education and School Education	2	Public Education and School Education	4	Public Education and Outreach
			6	Water Conservation Program Coordination and Staffing Support
BMP 3: Residential Programs	3	Residential Programs	3	Conservation Pricing
			4	Public Education and Outreach
			6	Water Conservation Program Coordination and Staffing Support
BMP 4: Commercial, Industrial, and Institutional	4	Commercial, Industrial, and Institutional	3	Conservation Pricing
			4	Public Education and Outreach
			6	Water Conservation Program Coordination and Staffing Support
BMP 5: Landscape	5	Landscape	3	Conservation Pricing
			6	Water Conservation Program Coordination and Staffing Support

9.2 WATER WASTE PREVENTION ORDINANCES

The City adopted a "Water Conservation and Water Supply Program," by Ordinance Number 1050 on September 2, 2014, which is actively enforced in drought situations. The Ordinance outlines three stages of water supply shortage, and the stage may be determined by the City. To enforce Ordinance 1050, the City will issue warnings and subsequent citations, possibly up to termination of service, to customers exceeding the conservation constraints. The City has currently determined that it is in a Stage 2 Water Supply Shortage of the Ordinance, which requires a number of water conservation measures to be in-place within the City including the reduction of consumer demand to meet anticipated demands. A copy of the Ordinance is located in Appendix I for reference.

9.3 METERING

Urban Water Management Planning Act Requirement:

CWC 526 (a)…Notwithstanding any other provisions of law, an urban water supplier that, on or after January 1, 2004, received water from the Federal Central Valley Project under a water service contract or subcontract…shall do both of the following: (1) On or before January 1, 2013, install water meters on all service connections to residential and nonagricultural commercial buildings…located within its service area.

CWC 527 (a)…An urban water supplier that is not subject to Section 526 shall do both the following: (1) Install water meters on all municipal and industrial service connections located within its service area on or before January 1, 2025.

The City estimates that there are no unmetered connections within City limits since there has never been a flat rate charged for water use within any sector. Therefore, no program for retrofitting existing unmetered connections needs to be identified. The City currently bills its retail customers (residence and commercial) according to meter consumption, and requires meters for all new connections and bills by volume-of-use.

9.4 CONSERVATION PRICING

The City purchases imported water from CBMWD at a two-tiered rate structure. This rate structure promotes water conservation and regional supply reliability. The City is committed to a voluntary purchase agreement with CBMWD, which outlines the amount of water to be purchased at a Tier 1 rate and the cost of the Tier 2 rate for water purchases that exceed the Tier 1 allotment.

In order to further promote water conservation and supply reliability, the City has adopted a similar rate structure for its customers. The City utilizes a two-tier structure for each customer account category. The City's water rate schedule is updated on a yearly basis. See Appendix J for water rates. Note that 1 unit is equivalent to 100 cubic feet or 748 gallons.

9.5 PUBLIC EDUCATION AND OUTREACH

The City utilizes several methods to promote water conservation and resource efficiency. The following section discusses public outreach and education programs CMWD utilizes.

Public Education and Outreach

The City and CBMWD work together to raise public awareness regarding many different issues regarding water and water supply. These issues include information pertaining to runoff pollution, water quality, and water conservation. The City and CBMWD have implemented several ways to educate the public about these broad topics that ultimately pertain to water use by the City customers.

The City provides public information via city-wide events, flyers, and direct mailings to customers. Additionally, customers can attend regular meetings of the Public Works Commission to receive information about the water system. Through its membership in CBMWD, the City is active in the California Water Awareness Campaign (CWAC), which is an association formed to coordinate efforts throughout the state during "May is Water Awareness Month". With this effort, water agencies throughout the state, large and small, can tap into a large pool of knowledge and materials to promote a water awareness message not only in May, but throughout the year. CBMWD has also launched its "In a Drought, Shut Your Tap!" campaign, which the City also participates in.

The table below shows the implementation schedule and actual/projected expenditures of certain of the above-listed conservation efforts through 2020.

Table 9.5.1
Public Information Actual Expenditures

Program	2006 to 2010	2011	2012	2013	2014	2015
Bill Inserts/Newsletters/ Brochures	X	X	X	X	X	X
Actual Expenditures	$7,500	$1,500	$1,500	$1,500	$1,500	$1,500

* Costs are based on City's best estimate of expenditures.

Table 9.5.2
Public Information Projected Expenditures

Program	2016	2017	2018	2019	2020
Bill Inserts/Newsletters/Brochures	X	X	X	X	X
Projected Expenditures	$1,500	$1,500	$1,500	$1,500	$1,500

School Education Programs

Water and environmental education are critical components of an effective outreach strategy. CBMWD offers a variety of elementary through high school programs free of charge to all schools within the City's service area. The following list shows the educational programs offered by CBMWD:

- Water Squad Investigations (Grades 4-12)
- Water Wanderings (Grades 4-5)
- Think Watershed (Grades 4-6)
- Think Earth! It's Magic (Grades K-5)
- Think Water! It's Magic (After School Program for Grades K-5)
- PEAK (professional development for teachers)
- Solar Cup (Grades 9-12)
- "Water is Life" Poster Contest (Grades 4-8)
- Waterlogged (Grades 9-12)
- Conservation Connection: Water & Energy in Southern California (Grades 5-8)

9.6 PROGRAMS TO ASSESS AND MANAGE DISTRIBUTION SYSTEM REAL LOSS

The City completes an annual pre-screening system audit of its potable water system to determine the need for a full-scale system audit. The system audit is performed by tracking the actual metered water use, which can be compared to total well production. Production is tracked monthly and reviewed annually to determine if the system exhibits significant losses.

Using 2015 data from the City of Paramount Water Consumption data provided, verifiable use as a percent of total production is calculated comparing actual metered sales (6,396 AF) against total supply into the system as measured at the wellhead meters (6,411 AF). Based upon this data, the City has approximately 8% loss in their system, which did not require the implementation of system audits.

9.7 WATER CONSERVATION PROGRAM COORDINATION AND STAFFING SUPPORT

As a member agency of CBMWD, the City takes advantage of the CBMWD's water conservation coordinator that works with cities and water agencies to enhance their conservation efforts. This close collaboration between CBMWD's conservation coordinator and City staff provides for a successful execution of the DMMs. In addition, CBMWD's conservation coordinator represents all member agencies at regional and statewide workshops and organizations. Conservation coordination within the City is an auxiliary responsibility of existing staff. Additionally, CBMWD's conservation coordinator also seeks Federal, State, and local funding to develop new programs that member agencies, such as the City of Paramount, can partner on and provide additional benefits to customers.

water

9.8 OTHER DEMAND MANAGEMENT MEASURES

The following subsections outline DMMs not categorized above.

Water Survey Programs for Residential Customers

Residential surveys evaluate all the water-using devices inside the home such as toilets, faucets, showerheads, etc. A trained surveyor checks for leaks and tests the flows indoor and outdoor. Once the survey is completed, recommendations are provided for retrofitting certain water use devices, and educational materials are also supplied to the resident. Residential surveys provide the City with a great opportunity to provide their customers with a program that offers customer outreach opportunities. Currently, surveys are completed on an as needed basis.

Residential Plumbing Retrofit

Residential plumbing retrofit recommends the distribution and retrofit of low-flow showerheads, Ultra-low flow toilets, and faucet aerators, as well as the adoption of enforceable ordinances.

The City and CBMWD distributes retrofit equipment, such as low-flow showerheads, at city-wide events such as the annual Safety Fair. Availability of conservation devices are also promoted within City publications. In addition, these items are distributed to any resident who makes a request.

Residential Rebates

Below is a summary of rebates provided by the City, to its residences.

High-Efficiency Washing Machines

As a member agency of CBMWD, the City participates in CBMWD's High-Efficiency Clothes Washer (HECW) Program. This program has exceeded all expectations and continues to be one of CBMWD's more successful programs. New HECWs cost more than regular inefficient models, in general, but by providing an $85 rebate (along with other utility/store incentives); consumers are choosing to purchase the new HECWs. The HECWs also have other benefits; not only do they save 50% water but also save 60% electricity and use less detergent. A high-efficiency washer will save approximately 34% to 80% of water usage compared to a traditional clothes washer (American Cleaning Institute, "High Efficiency Washers and Detergents", 2010, www.cleaninginstitute.org).

Table 9.8.1 illustrates the number of rebates distributed to the City's customers over the past five years. Approximately 182 washing machine rebates were given to residents of the City since 2005.

Table 9.8.1 High-Efficiency Washing Machine Rebate Summary					
Year	**FY 10-11**	**FY 11-12**	**FY 12-13**	**FY 13-14**	**FY 14-15**
Rebates Given	41	15	7	6	9

Residential ULFT Replacement Programs

The City participated in CBMWD's Ultra-Low Flush Toilet (ULFT) Program. Technology standards in the last 10 years have replaced the 1.6 gallon per flush (gpf) ULFT and the High-Efficiency 1.28 gpf Toilets (HET) with 0.8 gpf HETs. Today, CBMWD only distributes HETs at a rebate value of $40.

HETs have been a key element in the conservation success CBMWD has experienced over the years. Free HET distribution events have provided thousands of free toilets to local residents throughout CBMWD's service area. Since 2005, CBMWD has completed more than 5,000 HET installations in single family, multifamily and commercial, industrial and institutional facilities throughout CBMWD's service area. CBMWD receives requests to participate in various local partnerships to provide disadvantaged residents with HETs. CBMWD's service area is home to many disadvantaged residents and the need for free, water conserving toilets remains high. Given the current economic state, the conservation coordinator for CBMWD is focusing attention on securing additional sources of funding to make HET programs possible. Since 2005, 921 ULFTs or HETs were installed through this program in the City.

Table 9.8.2 High-Efficiency Toilet Rebate Summary					
Year	**FY 10-11**	**FY 11-12**	**FY 12-13**	**FY 13-14**	**FY 14-15**
Rebates Given	0	0	0	3	13

Rotating Sprinkler Nozzles

The City participates, through CBMWD, in a program to replace all standard sprinkler nozzles with rotating sprinkler nozzles. Rotating sprinkler nozzles can save, on average, up to 1,300 gallons per year compared to standard nozzles (Metropolitan Water District of Southern California, "Choosing Rotating Sprinkler Nozzles for Your Landscape", 2014, www.bewaterwise.com), and provide for more focused watering on landscaped areas. CBMWD offers a $2 rebate, per nozzle.

Weather-Based Irrigation Controllers

Residential Weather-Based Irrigation Controllers (WBICs) are programmable to use irrigation based on the weather in the area. The United States Environmental Protection Agency (US EPA) has published WaterSense® requirements for certification of devices/controllers. In general, all WaterSense®-certified controllers must utilize evapotranspiration data from the site to regulate or adjust irrigation. The City, through CBMWD, offers a $35 to $80 rebate, depending on size of landscaping and number of units used.

Rain Barrels

Rain barrels collect rain water from the roof and/or gutters and diverts the water to a collection basin (barrel). The water can later be used for irrigation by removing it from the barrel and irrigating plants or lawn areas. The City, through CBMWD, offers a rebate at $75 per barrel, with a minimum size of 50 gallons and maximum number of 4 barrels per household.

Commercial, Industrial, and Institutional Programs

The City participates in a region-wide CII rebate program developed by CBMWD in partnership with MWD. CBMWD participates in MWD's region-wide commercial "Save A Buck" rebate program which provides water conservation devices to be utilized in commercial, industrial and institutional facilities. These rebates are promoted to the businesses, schools and facilities throughout the City's service area. Rebates are offered for weather-based and central computer irrigation controllers, large rotary nozzles, rotating nozzles for pop-up spray heads, HETs, multi-family HETs, zero water urinals, laminar flow restrictors, in-stem flow restrictors, and water savings incentive programs.

Large Landscape Conservation Programs and Incentives

Despite the urbanization of Southern California, the region is dotted with large turf areas that require year-round irrigation to keep them green. Some of these areas within the include parks, schools, and street medians. The City is working along with CBMWD to reduce demand for water for irrigation purposes by providing recycled water in its service area. In addition to the MWD's

region-wide “SoCal Water$mart” and “Save A Buck” rebate programs, CBMWD also offers various large landscape conservation programs including:

- A District-wide large landscape managed irrigation program, incorporating maintenance, monitoring and tracking of individual property water savings
- Federal and State grants providing over 2,000 smart controllers to residential and commercial customers
- A city partnership program to install Smart Irrigation Controllers in parka and street medians
- A commercial landscape research grant to improve water use efficiency at schools, parks and open public spaces.

Most of the large landscape areas within the City are already taking advantage of recycled water, which helps to conserve potable water.

9.9 IMPLEMENTATION OVER THE PAST FIVE YEARS

Urban Water Management Planning Act Requirement:

CWC 10631 (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following: (1)(A)…a narrative description that addresses the nature and extent of each water demand management measure implemented over the past five years.

Implementation for each DMM is partially covered in the previous sections (Sections 9.2 through 9.8). Significant increases in rebate usage demonstrates that conservation efforts within the City are effective and that continued progress for water conservation targets are being met.

9.10 PLANNED IMPLEMENTATION TO ACHIEVE WATER USE TARGETS

Urban Water Management Planning Act Requirement:

CWC 10631 (f) Provide a description of the supplier's water demand management measures. This description shall include all of the following: (1)(A)…The narrative shall describe the water demand management measures that the supplier plans to implement to achieve its water use targets pursuant to Section 10608.20.

Continued outreach and support for rebates are the City's prime method of implementation. As stated in previous sections, CBMWD provides the support for rebates for its associated agencies.

9.11 MEMBERS OF THE CALIFORNIA URBAN WATER CONSERVATION COUNCIL

Urban Water Management Planning Act Requirement:

CWC 10631 (i) For purposes of this part, urban water suppliers that are members of the California Urban Water Conservation Council shall be deemed in compliance with the requirements of subdivision (f) by complying with all the provisions of the "Memorandum of Understanding Regarding Urban Water Conservation in California," date December 10, 2008, as it may be amended, and by submitting the annual reports required by Section 6.2 of that memorandum.

CBMWD is a signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of Understanding (MOU) regarding Urban Water Conservation in California.

10 PLAN ADOPTION, SUBMITTAL & IMPLEMENTATION

10.1 COORDINATION

Urban Water Management Planning Act Requirement:

CWC 10635(b) The urban water supplier shall provide that portion of its urban water management plan prepared pursuant to this article to any city or county within which it provides water supplies no later than 60 days after the submission of its urban water management plan.

The City will provide copies of its 2020 UWMP update to the following agencies within 60 days of submission of the plan to the California Department of Water Resources (DWR):

- County of Los Angeles
- Central Basin Municipal Water District
- Metropolitan Water District

Urban Water Management Planning Act Requirement:

CWC 10642 Prior to adopting a plan, the urban water supplier shall make the plan available for public inspection and shall hold a public hearing thereon. Prior to the hearing, the notice of the time and place of hearing shall be published within the jurisdiction of the publicly owned water supplier pursuant to Section 6066 of the Government Code. The urban water supplier shall provide notice of the time and place of hearing to any city or county within which the supplier provides water supplies. A privately owned water supplier shall provide an equivalent notice within its service area.

A draft of the UWMP was made available on the City's website, and electronic versions of the plan were mailed upon request. A public notice including the time and place of the hearing was advertised in the local newspaper once per week for two consecutive weeks prior to the hearing, according to Government Code Section 6066. A summary of the City's coordination efforts is provided in Tables 10.1.1 and 10.1.2.

Table 10.1.1
Coordination with Appropriate Agencies

Agency	Participated in UWMP	Commented on the Draft	Attended Public Meetings
County of Los Angeles			
Central Basin Municipal Water District			
General Public			
City of Paramount	✓	✓	✓

Table 10.1.2
Coordination with Appropriate Agencies

Agency	Contacted for Assistance	Received Copy of Draft	Sent Notice of Intention to Adopt	Not Involved / No Information
County of Los Angeles	✓	✓	✓	
Central Basin Municipal Water District	✓	✓	✓	
General Public	✓	✓	✓	

10.2 PLAN ADOPTION, SUBMITTAL, AND IMPLEMENTATION

Urban Water Management Planning Act Requirement:

CWC 10621(c) The amendments to, or changes in, the plan shall be adopted and filed in the manner set forth in Article 3 (commencing with Section 10640).

All amendments to the City's 2020 UWMP shall be adopted and filed consistent with the UWMP "Act" requirements.

Urban Water Management Planning Act Requirement:

CWC 10642 After the hearing, the plan shall be adopted as prepared or as modified after the hearing.

The plan was adopted by the City Council on MONTH #, 2021 as prepared. A copy of the adoption resolution is provided in Appendix B.

Urban Water Management Planning Act Requirement:

CWC 10643 An urban water supplier shall implement its plan adopted pursuant to this chapter in accordance with the schedule set forth in its plan.

The City will implement the strategies set forth in the plan immediately upon adoption by the City Council. Details on the implementation of specific sections are detailed in their respective sections of the plan.

Urban Water Management Planning Act Requirement:

CWC 10644(a) An urban water supplier shall submit to the department, the California State library, and any city or county within which the supplier provides water supplies a copy of its plan no later than 30 days after adoption. Copies of amendments or changes to the plans shall be submitted to the department, the California State library, and any city or county within which the supplier provides water supplies within 30 days after adoption.

The City submits copies of its 2020 UWMP to the following agencies within 30 days after adoption:

- The California Department of Water Resources
- The California State Library
- Los Angeles County

Additionally, any amendments or changes to the plan will be submitted to the above agencies within 30 days after adoption.

Urban Water Management Planning Act Requirement:

CWC 10645 Not later than 30 days after filing a copy of its plan with the department, the urban water supplier and the department shall make the plan available for public review during normal business hours.

The City will provide an electronic version of the final 2020 UWMP on its website for public review within 30 days of filing the plan with the California Department of Water Resources. Additionally, a hard copy will be available for review at City Hall, located at 16400 Colorado Ave, Paramount, CA 90723.