

# 4

## SYSTEM SUPPLIES

---

### 4.1 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 utilizes both potable and recycled water. The City obtains potable water from two sources: directly pumped groundwater and 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 of Paramount also has a recycled water system that provided 354 AF of recycled water in 2010. The City provided a total of 6,177 AF of water to a population of approximately 58,000 in 2010. Due to the slow rising population and the per capita demand reduction required by SBx7-7, projected water supplies increase by only 3.5% from 2015 to 2030. Although this is a small increase, this supply is expected to meet the water demand in 2030. More information comparing the projected water supply and demand can be found in Chapter 5.

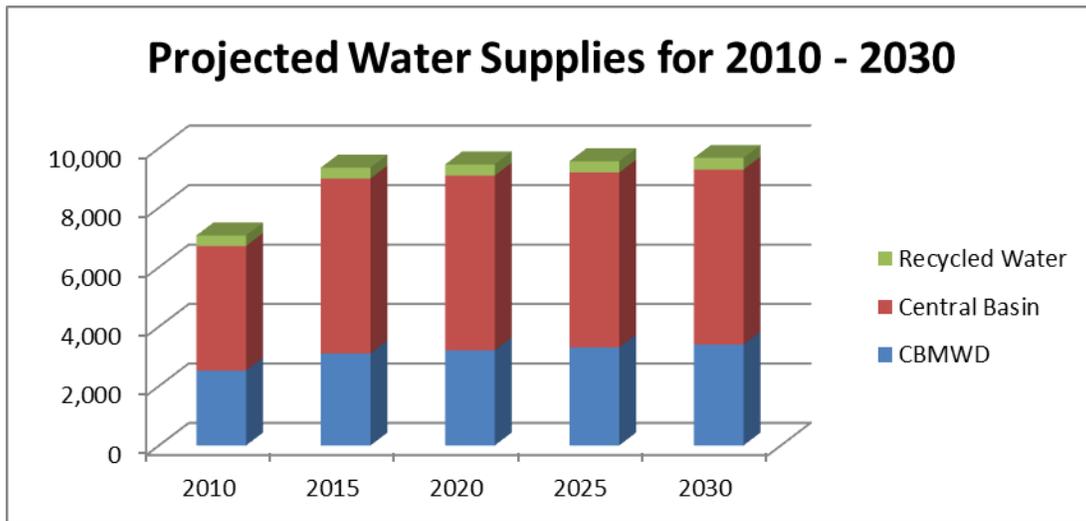
The City of Paramount obtains its groundwater from the Central Subbasin, one of four subbasins in the Coastal Plain of Los Angeles. The Central Subbasin is commonly referred to as the Central Basin, and is identified as such through the remainder of the report. The Central Basin is an adjudicated Basin. For the supply section, it is assumed that the City of Paramount pumps the total allotted amount of groundwater from the Central Basin: 5,883 AF. This is accurate, considering the construction of the new well, described in Section 4.6. More information on the adjudication of the Central Basin can be found in Section 4.2, which discusses the groundwater sources for the City of Paramount.

The total projected supplies available to the city through CBMWD, pumped groundwater, and recycled water are shown in Table 4.1.1. The supply sources are also illustrated in Figure 4.1.1.

Table 4.1.1					
Water Supplies — Current and Projected					
Water Supply Sources	2010	2015	2020	2025	2030
Central Basin Municipal Water District	2,518	3,100	3,200	3,300	3,400
Supplier-Produced Groundwater – Central Basin	4,194	5,883	5,883	5,883	5,883
Supplier-Produced Surface Water	0	0	0	0	0
Transfers In	0	0	0	0	0
Exchanges In	0	0	0	0	0
Recycled Water	354	363	371	380	390
Desalinated Water	0	0	0	0	0
<b>Total</b>	<b>7,066</b>	<b>9,346</b>	<b>9,454</b>	<b>9,563</b>	<b>9,673</b>

Units: acre-feet per year

Figure 4.1.1: Projected Water Supplies for the City of Paramount for 2010 through 2030



### Groundwater Supply

The City of Paramount utilizes groundwater from the adjudicated Central Basin. The groundwater supply to the City of Paramount is discussed in Section 4.2.

### Wholesale Water Supply

Water for use in the City of Paramount 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 of Paramount 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. In 2010, MWD delivered approximately 53,000 AF of water to CBMWD, of which 2,518 was sold to the City of Paramount for distribution.

The City of Paramount has provided the following estimates for water supplies in order to meet demands. The Central Basin Municipal Water District’s 2010 Urban Water Management Plan confirmed that the supplies shown in Table 4.1.1 will be available for use by the City of Paramount.

<b>Table 4.1.1</b>					
<b>Wholesale Supplies — Existing and Planned Sources of Water</b>					
<b>Wholesale Sources</b>	<b>Contracted Volume</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Central Basin Municipal Water District	Yes	3,100	3,200	3,300	3,400

*Units: acre-feet per year*

**Recycled Water Supply**

The City of Paramount provides recycled water for irrigation throughout the service area. The City of Paramount’s Recycled Water system is discussed in detail in Section 4.5.

**4.2 GROUNDWATER**

***Urban Water Management Planning Act Requirement:***  
*10631 (b) (1s) groundwater...identified as an existing or planned source of water available to the supplier?*

The City of Paramount 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. 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 DWR manages groundwater extractions.

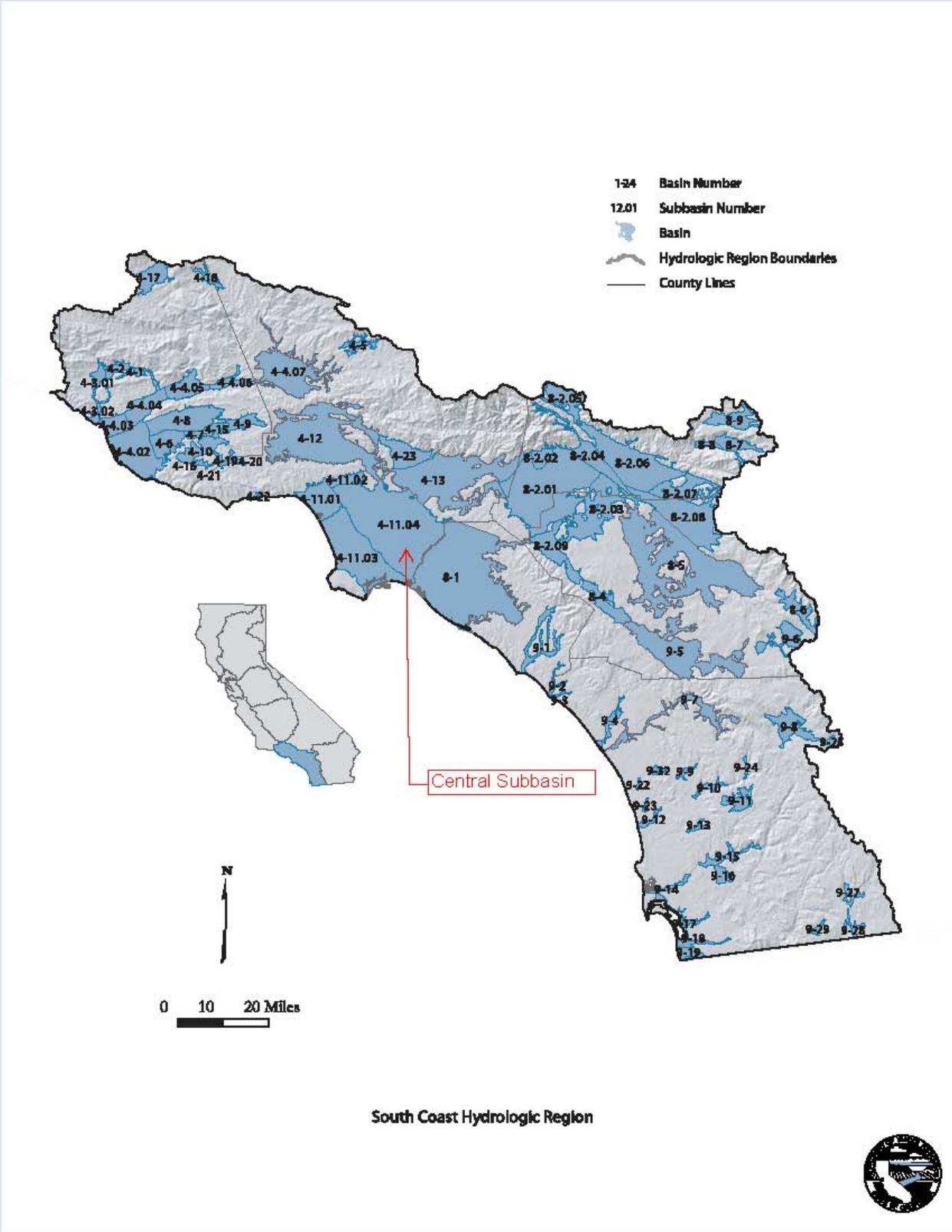
***Urban Water Management Planning Act Requirement:***

*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 of Paramount 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, as provided in DWR's Bulletin 118 can be found in Appendix F. Additionally, the Central Basin's location as part of the South Coast Hydrologic Region can be seen in Figure 4.2.1.

Figure 4.2.1: 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 can be found in Appendix G.

The total allotted pumping rights from the Central Basin from all wells is 233,894 AFY. The total allotted pumping rights for the City of Paramount is 5,883 AFY. The City of Paramount 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 of Paramount may exceed its water pumping rights is if another water retailer chooses to lease water pumping rights to the City of Paramount. Although this is possible and is an option for the future, the City of Paramount has in past leased its own water pumping rights to other retailers; for example, in 2009 the City of Paramount leased a total 900 AF to the Cities of Long Beach (400 AF) and Cerritos (500 AF).

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 174,000 AF were pumped in 2009), possible conditions of overdraft must still be considered. To avoid conditions of overdraft, the Water Replenishment District 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 Water Replenishment District 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 4.2.1 illustrates the amount of groundwater pumped from the Central Basin over the last five years.

<b>Table 4.2.1 Groundwater — Volume Pumped</b>						
<b>Basin name(s)</b>	<b>Metered or Unmetered<sup>1</sup></b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
Central Basin	Metered - volumetric	5,125	3,069	4,179	4,933	4,194
<b>Total groundwater pumped</b>		5,125	3,069	4,179	4,933	4,194
<b>Groundwater as a percent of total water supply</b>		65%	39%	53%	65%	59%

*Units: acre-feet per year*

In the years from 2006-2010, the quantity of groundwater pumped was not sufficient to meet the demands of the City of Paramount. As a result, the City supplemented water supply with recycled water and potable water purchased from the CBMWD. Together, these three sources were sufficient in meeting the total demands of the City of Paramount.

Currently, the groundwater supply is provided through two wells, Well No. 13 and Well No. 14. Together, these wells do not have sufficient capacity to pump the full 5,883 AF allotted to the

City of Paramount. Although if pumping the full water allotment under the adjudication, the groundwater supply would still be insufficient for the City of Paramount’s total water needs. However, pumping the full capacity does reduce the City’s dependence on imported water. The City of Paramount is constructing a third well to allow the pumping of the fully allocated amount of groundwater from the Central Basin. The capacity of the additional well is discussed in Section 4.6.

**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 of Paramount intends to continue using groundwater pumped from the Central Basin as the majority of the supply for the City of Paramount water demand. The projected amount of water to be pumped is shown in Table 4.2.2 below. The numbers projected in Table 4.2.2 are based on the Central Basin adjudication and anticipate the completion of Well No. 15 in September 2011. Upon completion, this additional well will allow the City of Paramount to pump the full amount allotted by the adjudication agreement. Currently, the volume pumped is limited by the capacities of the two wells. With the additional well adding between 2,500 and 3,000 GPM to the supply, the water reliability is expected to increase as redundancy in the pumping capacity of groundwater from the Central Basin reduces the likelihood that sufficient water quantities may not be pumped in the event of a well failure.

<b>Table 4.2.2</b>				
<b>Groundwater — Volume Projected to be Pumped</b>				
<b>Basin name(s)</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Central Basin	5,883	5,883	5,883	5,883
<b>Total groundwater pumped</b>	5,883	5,883	5,883	5,883
<b>Percent of total water supply</b>	63%	62%	62%	61%

The percentages reported in Table 4.2.2 represent an increase in the average percent of groundwater supplied to the City of Paramount over the last 10 years. Historically, the City has pumped on average 56% of its groundwater, and obtained the remainder from recycled and imported water. However, as the new well will allow full pumping capacity of groundwater from the Central Basin, the City of Paramount’s dependence on imported water decreases.

### 4.3 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 of Paramount, 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 2010 Urban Water Management Plans.

The City of Paramount 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 of Paramount, these interconnections are primarily used only during times when the CBMWD connections to the City of Paramount are unavailable due to maintenance or repair, or during emergency situations. The City of Paramount 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.

**Table 4.3.1**

**Transfer and Exchange Opportunities**

<b>Transfer Agency</b>	<b>Transfer or Exchange</b>	<b>Short Term or Long Term</b>	<b>Proposed Volume</b>
City of Long Beach	0	0	0
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>

*Units: acre-feet per year*

## 4.4 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 of Paramount is not currently exploring the possibility of using desalinated water as a water source independently. However, MWD is currently exploring the potential for use and distribution of desalinated water as part of its supply source. As an end user of water supplied through MWD, the City of Paramount 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 provides incentives for its member agencies to develop water through desalination; up to \$250 per AF for all produced supplies. Currently, four desalination projects are receiving funding through MWD's SDP program. Each program has been vital in discovering and addressing both the technical and legal challenges associated with constructing a desalination plant. As of 2011, MWD reports that the Long Beach, South Orange Coastal, and West Basin Water Desalination Projects are currently in the pilot study process, while the Carlsbad Seawater Desalination Project is in the permitting phase. Table 4.4.1 shows the projected supplies provided by these four water desalination plants. In the coming years, these projects will help to determine the feasibility of using desalinated water for distribution through the City, either by establishing a water desalinating plant or through the purchase of desalinated water through MWD or another source.

**Table 4.4.1  
Current Desalination Projected Capacities**

<b>Project</b>	<b>Member Agency</b>	<b>Projected Capacity (AFY)</b>
Long Beach Seawater Desalination Project	Long Beach Water Department	10,000
South Orange Costal Ocean Desalination Project	Municipal Water District of Orange County	16,000-28,000
Carlsbad Seawater Desalination Project	San Diego County Water Authority	56,000
West Basin Seawater Desalination Project	West Basin Municipal Water District	20,000
<b>Total</b>		102,000-114,000

MWD’s current goal is to supply 125,000 AFY of water through seawater desalination by 2025.

## 4.5 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.*

The City of Paramount 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, Central Basin has become an industry leader in water re-use.

The City of Paramount is part of an integrated water recycling program that includes the Cities in Los Angeles County as well as water districts including the Metropolitan Water District of Southern California. Wastewater is collected and treated by the Los Angeles County Sanitation District (LACSD). Wastewater undergoes tertiary treatment (as described below) and is subsequently distributed for recycled water use or disposed of as necessary. Water is treated at one of 11 wastewater and water reclamation facilities and then sold and distributed throughout Los Angeles County. The LACSD reports nearly 200,000 AFY of wastewater treated to recycled water quality. 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 Water Recycled Plant and San Jose Creek Water Reclamation Plant are the source of recycled water for the City of Paramount. After the tertiary treatment process, described below, recycled water available for use, groundwater recharge, or discharge to the ocean is available for use. The CBMWD purchases a portion of the recycled water from these two plants. Water is then sold and distributed to the City of Paramount's recycled water customers. In 2010, San Jose Creek and Los Coyotes Plants treated a total of 111,552 AF of wastewater to recycled water quality standards. Of this, 354 AF was eventually distributed to the City of Paramount.

The City of Paramount is part of a recycled water distribution system that includes the members of CBMWD, San Gabriel Valley Municipal Water District (SGVMWD), and the Upper San Valley Gabriel Municipal Water District (USGVMWD). The existing integrated recycled water system for these customers consists of approximately 71.3 miles of pipeline, four booster stations, three control valves, and no reservoirs.

Recycled water, used for irrigation purposes, is treated (as described below) and then distributed or disposed of as necessary. The recycled water system is designed to serve irrigation water for customers including golf courses, homeowner's association grounds, and public landscapes such as parks, schools, and highway medians.

***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 of Paramount is collected by the LACSD sewage system and sent to one of 11 treatment or wastewater plants. At these plants, the water goes through a three stage treatment process consisting of primary, secondary, and tertiary treatment stages. After tertiary treatment, water is pumped and made available to 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 Joint Water Pollution Control Plant 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 reclaimed water. 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.*

All of the wastewater collected by the LACSD is treated to tertiary standards, as described above. Once the water is treated, it is either used or discharged to the ocean. The total combined capacity of the two water reclamation plants that serve the City of Paramount and CBMWD, the San Jose Creek WRP and the Los Coyotes WRP, is approximately 153,000 AFY. The 2010 CBMWD UWMP projected that wastewater collected within its service area (encompassing the City of Paramount) will be approximately 110,000 AF in 2015.

It is estimated that the water used by the City for non-landscape and irrigation needs will be converted to wastewater, and sent to the LACSD for treatment. In 2010, approximately 93% of total potable water use was not used for landscape or irrigation needs. To project the total wastewater flows for the next 20 years, this factor was used. These values are shown in Table 4.5.1. In addition, Table 4.5.2 shows the amount of treated wastewater expected to be discharged. This value is obtained by multiplying the percentage of wastewater that is normally discharged by LACSD, which is approximately 56.1% of all recycled water produced. This factor was applied to the values in Table 4.5.1 to estimate the amount of wastewater from the

City of Paramount that would not be used for recycled water purposes, and instead discharged to the ocean. These projected discharge values are shown in Table 4.5.2.

<b>Table 4.5.1</b>						
<b>Recycled Water — Wastewater Collection and Treatment</b>						
<b>Type of Wastewater</b>	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
<b>Wastewater collected &amp; treated in service area</b>	7,101	5,745	6,768	6,746	6,911	7,079
<b>Volume that meets recycled water standard</b>	7,101	5,745	6,768	6,746	6,911	7,079

*Units: acre feet per year*

<b>Table 4.5.2</b>						
<b>Recycled Water — Non-Recycled Wastewater Disposal</b>						
<b>Method of Disposal</b>	<b>Treatment Level</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Discharge to Ocean	Tertiary	3,223	3,797	3,785	3,877	3,971
<b>Total</b>						

*Units: acre feet per year*

***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 40 sites within the City of Paramount service area, with a total estimated demand of 504 AFY. The 2008 CBMWD Recycled Water Plan identifies that all of these 40 customers use water for landscape irrigation. Recycled water users requiring more than 20 AFY of recycled water within the City of Paramount are identified in Table 4.5.3.

**Table 4.5.3  
Recycled Water — Potential Future Use (Current Customers)**

<b>Name</b>	<b>Recycled Water Demand</b>	<b>Water use</b>
<b>ABC Nursery/Paramount</b>	40	Irrigation
<b>Alondra Junior High School</b>	58	Irrigation
<b>Compton Golf Course</b>	50	Irrigation
<b>Paramount High School</b>	20	Irrigation
<b>Paramount Junior High School</b>	40	Irrigation
<b>Paramount Park</b>	36	Irrigation
<b>Spane Park</b>	29	Irrigation
<b>Other Users</b>	231	Irrigation

***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 identifies areas for expansion of the entire CBMWD recycled water system. In total, the plan identifies 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 is identified as demand that could be supplied through the City of Paramount recycled water system. The types and feasibility of these are located in Table 4.5.4 below. Expanding the recycled water system is currently not considered feasible because the current plan by the CBMWD to expand the recycled water system does not include the City of Paramount. Instead, the major project, the Southeast Water Reliability Project (SWRP), involves a much higher potential of recycled water users. The SWRP is described below.

Table 4.5.4 Recycled Water — Potential Future Use						
User type	Description	Feasibility	2015	2020	2025	2030
<b>Agricultural irrigation</b>						
<b>Landscape irrigation</b>	Parks, School Districts, Medians, Nursery's, etc.	<b>No</b>	612	612	612	612
<b>Commercial irrigation<sup>3</sup></b>						
<b>Golf course irrigation</b>						
<b>Wildlife habitat</b>						
<b>Wetlands</b>						
<b>Industrial reuse</b>	Laundry, Paramount Petroleum, Metals Processing	<b>No</b>	535	535	535	535
<b>Groundwater recharge</b>						
<b>Seawater barrier</b>						
<b>Geothermal/Energy</b>						
<b>Indirect potable reuse</b>						
<b>Total</b>			1,147	1,147	1,147	1,147

Units: acre-feet per year

**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 4.5.5 shows the projected 2005 use for recycled water in 2010. It can be seen that the actual use for 2010 did not meet the expected projection. This could be due to a general decrease in the use of recycled water, both within the City of Paramount and throughout the whole customer base of the LACSD.

<b>Table 4.5.5 Recycled Water — 2005 UWMP Use Projection Compared to 2010 Actual</b>		
<b>Use type</b>	<b>2010 Actual Use</b>	<b>2005 Projection for 2010</b>
Agricultural irrigation	17.57	99
Landscape irrigation	263.02	320
Commercial irrigation	0	0
Golf course irrigation	27.55	0
Wildlife habitat	0	0
Wetlands	0	0
Industrial reuse	11.15	13
Groundwater recharge	0	0
Seawater barrier	0	0
Geothermal/Energy	0	0
Indirect potable reuse	0	0
<b>Total</b>	<b>319.29</b>	<b>432</b>

*Units: acre-feet per year*

**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 of Paramount, CBMWD, and MWD encourage recycled water use among its customers. One of the most compelling reason ways to encourage the use of recycled water is through the use of 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 also encourages the use of recycle 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 4.5.5. These numbers are based on the current plan to expand different parts of the recycled water system within the CBMWD service area, not including the City of Paramount, as part of the SWRP.

<b>Table 4.5.5</b>					
<b>Methods to Encourage Recycled Water Use</b>					
<b>Actions</b>	<b>Projected Results</b>				
	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Financial Incentives	0	0	0	0	0
<b>Total</b>	0	0	0	0	0

*Units: acre-feet per year*

In addition to the City of Paramount 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 2010 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 of Paramount’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 use for recycled water within the City of Paramount, 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. Because of this, recommendations were not made to include the City of Paramount in the Capital Improvement Plan for expanding the recycled water system. Instead, priority was given to a project with larger potential users. The Southeast Water Reliability Project (SWRP) will provide consist of 11 miles of pipeline extending from Pico Rivera to Vernon. It is expected that the SWRP will increase recycled water sales to 11,000 AFY within the first few years and ultimately up to 16,000 AFY.

## 4.6 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 of Paramount’s 2007 Water Master Plan, the City is constructing a new well, Well No. 15, to supplement the groundwater supply. Currently, the City is unable to pump all of the water allotted by the adjudication. This increases the City’s dependence on imported water from the CBMWD and MWD. The new well will both increase supply reliability, as the City’s pumped groundwater is a more reliable source, as well as decrease water costs, as it is more cost effective for the City of Paramount to utilize groundwater. In addition, a new well will increase the total pumping capacity of the City of Paramount to above its adjudicated rights. Although the City will not pump beyond the allotted amount, the additional well provides additional redundancy in the water supply system. In the event that Well No. 13 or Well No. 14 were to be unusable for a period of time, redundant water supplies would be able to account for a portion of the lost supply.

The new Well No. 15 will treat water at the well site to ensure the water meets all potable standards, including those for arsenic, manganese, and bacteria contamination. The projected capacity of Well No. 15 is shown in Table 4.6.1.

<b>Project Name</b>	<b>Start &amp; End Date</b>	<b>Potential Project Constraints</b>	<b>Normal -year supply</b>	<b>Single-dry year supply</b>	<b>Multiple -dry year first year supply<sup>3</sup></b>	<b>Multiple -dry year second year supply<sup>3</sup></b>	<b>Multiple -dry year third year supply<sup>3</sup></b>
Well No. 15	Sept. 2011	None	2,928	2,928	2,928	2,928	2,928
<b>Total</b>			2,928	2,928	2,928	2,928	2,928

*Units: acre-feet per year*