IV. ENVIRONMENTAL IMPACT ANALYSIS
   N. UTILITIES
      (1) WATER CONSUMPTION

1.0 INTRODUCTION

This section addresses the potential impacts of the Proposed Project on water supply and water distribution infrastructure. This analysis estimates the potable and reclaimed water demands of the project at buildout and compares this demand to existing and planned water supply sources and conveyance facilities. The analysis addresses the impacts that would occur for the Project as Proposed, for the Project’s Equivalency Program and for the Project’s secondary impacts that would occur from the implementation of the Project’s off-site mitigation measures.

The impacts associated with on-site water resources, such as groundwater and surface water, are addressed in Section IV.C, Water Resources, of this EIR.

2.0 ENVIRONMENTAL SETTING

2.1 Regulatory Framework

2.1.1 State Level

Title 20 of the California Administrative Code, (CAC) Section 1604, establishes efficiency standards (i.e., maximum flow rates) for all new showerheads, lavatory faucets, and sink faucets and prohibits the sale of fixtures that do not comply with the regulations.

Other applicable State water conservation laws include:

- Health and Safety Code Section 17921.3 requires all new buildings, as of January 1, 1983, to install water conservation water closets, as defined by American National Standards Institute (ANSI) Standard A112.19.2, and urinals and associated flushometer valves that use less than an average of 1.5 gallons per flush.

- Title 20, CAC, Section 1604(f) establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory and sink faucets, as specified in ANSI A112.18.1M-1979.
• **Title 20, CAC, Section 1606(b)** prohibits the sale of fixtures that do not comply with regulations.

• **Title 24, CAC, Section 2-5307(b)** prohibits the installation of fixtures unless the manufacturer has certified compliance with the flow rate standards.

• **Title 24, CAC, Section 2-5352(i) and (j)** address pipe insulation requirements that can reduce water used before hot water reaches fixtures.

• **Health and Safety Code Section 4047** prohibits installation of residential water softening appliances unless accompanied by water conservation devices on fixtures using softened water.

The California Department of Health Services (DHS) is charged with regulating the quality of reclaimed water. The Reclaimed Water Unit of DHS has developed the water reclamation criteria commonly known as Title 22 of the CAC, which prescribes treatment requirements for reclaimed water to be used for non-potable purposes and establishes standards for distribution and use. The West Basin Municipal Water District (WBMWD), the recycled water provider for the Proposed Project site, is regulated by the Regional Water Quality Control Board (RWQCB) for water quality, including Title 22 recycled water. As a permit condition, the WBMWD continually monitors recycled water quality and submits annual reports to the RWQCB, allowing them to continue to procure Title 22 water to customers in the vicinity of the Proposed Project site.

The California Urban Water Management Planning Act requires every municipal water supplier who serves more than 3,000 customers or provides more than 3,000 acre-feet per year (AF/yr) of water to prepare and adopt an Urban Water Management Plan (UWMP). UWMPs are required to include estimates of past, current, and projected potable and recycled water use, identify conservation and reclamation measures currently in practice, describe alternative conservation measures, and provide an urban water shortage contingency plan.

The requirements for an UWMP were recently amended by Senate Bill 610 (Costa) and signed into law by Governor Davis in October 2001. Under Senate Bill 610, an urban water supplier (e.g., the Los Angeles Department of Water and Power [LADWP]) responsible for the preparation and periodic updating of an UWMP must describe the water supply projects and programs that may be undertaken to meet the total project water use of the service area. If groundwater is identified as a source of water available to the supplier, Senate Bill 610 requires additional information to be included in the UWMP such as: (1) a groundwater management plan; (2) a description of the groundwater basin(s) to be used and the water use adjudication rights, if any; (3) a description and analysis of groundwater use in the past five years; and (4) a discussion of the sufficiency of the groundwater that is projected to be pumped by the supplier.
Similarly, Assembly Bill 901, which was also signed into law by Governor Davis in October 2001, requires UWMP’s to contain information specifically pertaining to the quality of water supply sources. In addition to requirements related to UWMPs, Senate Bill 610 recognizes the need to link water supply and land use planning as currently required by Section 10910 of the Water Code. Under certain circumstances, a city or county is required to request in conjunction with a development project a water supply assessment containing specific information from the water service provider. Under SB 610, it is the responsibility of the water service provider to prepare a water supply assessment requested by a city or county for any “project” defined by Section 10912 of the Water Code that is subject to CEQA. The bill prescribes a timeframe within which a public water system is required to submit the assessment to the city or county and authorizes the city or county to seek a writ of mandamus to compel the public water system to comply with requirements relating to the submission of the assessment. If the provider determines that water supplies are, or will be, insufficient, plans must be submitted for acquiring additional water supplies. Additionally, the bill requires the city or county to include the water supply assessment and other pertinent information in any environmental document prepared (e.g., EIR) for the project pursuant to the act. Similarly, Senate Bill 221 (Kuehl), a companion bill to Senate Bill 610, modifies state law (i.e., the Government Code, Subdivision Map Act and the Business and Professions Code) to focus on the link between water supply and land use planning, particularly for new large projects in non-urban areas (i.e., under certain conditions, approval of a subdivision map is prohibited unless the legislative body of a city or county provides written verification from the water service provider that a sufficient water supply is, or will be, available). LADWP, as a water service supplier, has incorporated the provisions of SB 610 and SB 221 into its water supply planning process. The water demand assessment for individual projects, such as the Proposed Project, in conformance with the UWMP, evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed.\footnote{Bautista, Alvin, Water Resources Planning and Policy Division, Los Angeles Department of Water and Power, Personal Communication, May 10, 2002.}

\subsection*{2.1.2 Local Level}

The LADWP is the water purveyor serving the Proposed Project site. In recent years, conservation has become an important element of managing the water supplies of Southern California. To this end, LADWP has prepared an UWMP to promote efficient use and management of its water resources.
In addition to summarizing historic, present, and projected water demand and water supply sources, the City’s Plan outlines the strategies that will be used to meet the City’s current and future water needs, within the following categories:\footnote{469 City of Los Angeles Department of Water and Power, Urban Water Management Plan Fiscal Year 2000-2001 Annual Update (www.ladwp.com/water/supply/uwmplan/2001Update.pdf).}

- Protect existing water supplies from contamination and clean up ground water supplies;
- Pursue cost-effective water conservation and recycling projects to increase supply reliability and offset increases in water demand due to growth;
- Seek outside funding to offset capital investments needed to develop alternative supplies such as conservation and recycling projects and resource management programs;
- Maintain the structural integrity of the Los Angeles Aqueduct and in-City water distribution systems.

In order to reduce the impact of potential supply deficiencies, the Los Angeles City Council has enacted ordinances mandating measures to reduce water consumption. Ordinance Nos. 163,532 and 164,093, enacted in 1988, with subsequent amendments, require new buildings to install all low-flush toilets and urinals (1.5 gallons per flush) in order to obtain building permits. Ordinance No. 163,532 also contained provisions requiring xerophytic (low-water consumption) landscaping. This was superseded by Ordinance No. 170,978, which was approved by the City Council in April 1996 and has been in place since July 12, 1996. Ordinance No. 170,978 is a comprehensive landscape ordinance that applies to all projects except single-family dwellings that create 2,000 sq.ft. or more of non-permeable surface. The Ordinance replaces the blanket requirement for xeriscape with “Water Management.” Although a xeriscape point system chart is still used, it has been slightly augmented by increased choices as well as strengthened so that projects have to propose and document substantive water conserving features and techniques. The measures described in the above-mentioned ordinances are considered baseline project permitting conditions.

In an effort to maintain adequate water supplies to its customers during drought conditions, LADWP adheres to the provisions of the Water Shortage Contingency Plan, contained in the 1995 LADWP Urban Water Management Plan.\footnote{470 Los Angeles Department of Water and Power, “Water Shortage Contingency Plan,” May 1995. Included as Appendix B in the Los Angeles Department of Water and Power “Urban Water Management Plan for the City of Los Angeles,” November 1995.} The Water Shortage Contingency Plan summarizes the effort by LADWP to continue to provide a sufficient supply of
water to meet the health and safety needs of the City in case of a water supply shortage condition. Depending on the severity of conditions, LADWP implements demand reduction measures to minimize wasteful water use using a phased approach. The main element of this phased approach is the City’s water rates structure that was enacted in February 1993. This two-tiered rate has a lower block set to accommodate water use at a typical home. The upper block is set at a price to reflect the true cost of acquiring and delivering additional water. In addition, the rate structure has increased upper block water rates during the summer to encourage conservation during the hotter periods of the year when demand is higher.

To increase conservation during periods of drought or other water shortage periods, the water rate structure has shortage year rates as well. When the Board of Water and Power Commissioners determines that the water supply available to the City is insufficient to meet the City’s normal water supply needs, it determines the degree of shortage and applies the corresponding commodity charges. This procedure of increasing the price of water to cause the desired demand reductions replaces the Emergency Water Conservation Plan (EWCP) provisions, which were approved in July 1990 as part of City Ordinance No. 166,080. The EWCP required “across the board” water reductions by set percentages (rationing) from a specified base year usage, and was perceived to be unfair to those who conserved. Additional measures can be phased in as a drought continues to provide some immediate demand reductions and increase public awareness of the need to conserve water. The following list of drought-related demand reduction actions could be taken and used in conjunction with the water rate structure’s shortage year rates:

**Mandatory Prohibitions Against Wasteful Practices.** The provisions of the EWCP which remain in effect are the Phase IA conditions known as Prohibited Uses. These contain six wasteful water use practices that are permanently prohibited by all City of Los Angeles customers. These prohibited uses are intended to eliminate waste and increase public awareness of the need to conserve water:

1. No hose-washing of hard surfaces such as: walkways, driveways, or parking areas.

2. No water shall be used to clean, fill, or maintain levels in decorative fountains unless part of a recirculating system.

3. No restaurant, hotel, café, cafeteria, or other public place where food is sold shall serve drinking water to any customer unless expressly requested.

4. Water leaks must be reported and repaired in a timely manner.
5. No lawn, landscape, or other turf area shall be watered between the hours of 10:00 A.M. and 5:00 P.M. from April through September, and between 11:00 A.M. and 3:00 P.M. from October through March (subject to City Council approval). These restrictions do not apply to licensed nurseries, gardeners, and drip irrigation systems.

6. No watering that causes excess water to runoff onto an adjoining sidewalk, driveway, street, gutter, or ditch.

Penalties for violations of prohibited uses consist of written warning for the first violation, $50 surcharge for the second violation, $100 surcharge for the third violation, and $150 surcharge for the fourth violation. A flow-restrictor or possible shutoff may be imposed after four or more violations.

**Severe Shortage (15 to 20 percent below average year).** When supplies are projected to be 15 to 20 percent below the average year supply, the following prohibited uses are added:

1. Wash cars only with bucket or hand-held hose with shut-off valves; restrict frequency of landscape irrigation to two times per week.

2. Reduce water used for street cleaning. (The street cleaning program, which normally uses relatively little water, has been modified because of the drought to reduce potable water use, and is utilizing reclaimed water where practicable.)

3. Develop a large industrial customer incentive program that provides a monetary credit for all water reduction beyond a specified goal.

4. Implement a surcharge program for single-family and duplex customers who have not yet complied with the retrofit provisions of City Ordinance 35362, the Water Conservation Ordinance to Reduce Sewer Flows.

**Critical Shortage (20 to 35 percent below average year).** When supplies are projected to be 20 to 35 percent below the average year supply, the following prohibited uses are added:

1. Eliminate municipal public water uses (such as street cleaning) not required for health or safety unless tank truck water supplies of reclaimed wastewater are being used.
2. Irrigate public parks and landscape areas only with reclaimed water.

**Super Critical Shortage (35 to 50 percent below average year).** When supplies are projected to be 20 to 35 percent below the average year supply, the following prohibited uses are added:

1. Commercial car washes must use recycled water in both the soap and rinse cycles; eliminate private irrigation of turf and landscaped areas except by drip irrigation systems or buckets.

2. Require all water used for construction to be reclaimed water.

LADWP’s long-range water conservation program is driven by the need to increase water use efficiency. This will reduce demand, extend supply and therefore, provide for greater reliability. Toward that end, LADWP is continuing to pursue its proposed programs, maintain and increase its existing programs, and develop new and innovative programs. Emphasis is being placed on structural conservation, such as ultra-low-flush toilet replacements, which result in permanent per capita water use reduction. The ability to achieve water reduction during droughts by voluntary measures is likely to be more difficult in the future as customers adjust to a conservation ethic and adopt permanent measures to reduce water use.

City Ordinance No. 170,022, approved on September 22, 1994, adopted Appendix J of Part 5 of Title 24 of the California Code of Regulations (California Plumbing Code) by reference into the Los Angeles Municipal Code. This establishes provisions for the construction, alteration, and repair of graywater systems for subsurface landscape irrigation at single-family dwellings.

**2.2 Existing Conditions**

**2.2.1 Water Supply**

**Los Angeles Department of Water and Power**

LADWP obtains its water supplies from three major sources: (1) The Owens Valley and the Mono basin on the east side of the Sierra Nevada Mountains via the Los Angeles Aqueduct (LAA); (2) Northern California and Colorado River imports from the Metropolitan Water District of Southern California (MWD); and (3) Local groundwater basins, including the San Fernando, Sylmar, Central Coast and West Coast Basins. In addition to these sources, some wastewater within the LADWP service area is reclaimed for reuse for irrigation, industrial use, and groundwater recharge.
The percentage of water supplied by the three primary water sources has changed over time. Throughout the 1970s and most of the 1980s, the LAA provided the majority (74 percent) of the City’s water, with local groundwater and MWD sources providing the remainder. This distribution varied substantially due to the drought of 1987 to 1992, as well as litigation over water diversions from the Owens Valley and the Mono Basin. In addition, groundwater contamination in the San Fernando Valley area has reduced the availability and usability of local groundwater supplies. Following these unusual circumstances, the distribution returned to similar levels as in the 1970s and 1980s. In fiscal year 2001-2002, the LAA delivered 228,396 acre-feet (AF) (34 percent), local groundwater produced 73,387 AF (11 percent), and MWD supplied 372,357 AF (55 percent). During that year, LADWP purchases made up approximately 15 percent of MWD’s total water sales to the Southern California region.

During fiscal year 2001-2002, LADWP supplied 679,099 AF of water, accounting for a 2 percent increase from the prior year’s usage of 665,695 AF. Single-family residential customers consumed 35 percent of all water used, multi-family residential 28 percent, commercial 17 percent, governmental 7 percent, industrial 3 percent, and non-revenue water 10 percent. Non-revenue, or unaccounted water, consists of unbilled water used for fire fighting, miscellaneous system losses (e.g., evaporation, system leaks, water main breaks), water meter-read inaccuracy, and other factors. LADWP anticipates annual water demand within the Department’s service area to increase by 2010 to between 718,000 AF (in a normal year) and 761,000 AF (in a dry year), which represents a demand increase of 5.7 percent to 12.1 percent, respectively, between 2002 and 2010. This increased demand in water use is accounted for in LADWP’s Final Year 2000 Urban Water Management Plan Update, and LADWP has identified various means and options for securing adequate water supplies to meet the needs anticipated for 2010, as well as through the year 2020.

Metropolitan Water District

MWD provides all, or a portion of, the water supply for 27 member agencies comprising 14 cities, 12 municipal water districts, including LADWP, and one county water authority. MWD imports water from the Colorado River Aqueduct (CRA) and the State Water Project (SWP) in the Sacramento-San Joaquin Delta and distributes it to member agencies.

Based on projected growth, MWD expects that water demands in the MWD service area will rise from 3.6 million acre-feet (AF) to 4.8 million AF in 2020. In order to accommodate this projected growth in water demand, MWD developed an Integrated Water Resources Plan (IRP) in 1996. The IRP is a 25-year comprehensive water resources plan for Southern California. Its objective is to ensure the reliability, affordability, quality, diversity, and adaptability of the regional water supply. MWD anticipates that implementation of the IRP will allow it to provide for all the firm wholesale water demands of its member agencies in 98 out of 100 years, with the remaining years requiring a shortage allocation plan.

The IRP proposes that a preferred resource mix of imported and local supplies be used to meet projected needs. The future supply sources for MWD include groundwater pumping, surface water diversion, water recycling including reclamation, groundwater recovery, CRA, SWP, and storage and water transfers.\footnote{476 Metropolitan Water District of Southern California, \textit{Integrated Resources Plan}, 1996.}

In early 2002, a federal court decision required that California be limited to 4.4 million AF/year of Colorado River water, pursuant to a 1964 U.S. Supreme Court Decree in Arizona v. California and the Boulder Canyon Project Act. Since water from the CRA represents a substantial portion of MWD’s supplies, MWD issued a report to address the challenges and solutions for dealing with its supply reduction.\footnote{477 Metropolitan Water District of Southern California, \textit{“Report on Metropolitan’s Water Supplies: A Blueprint for Reliability,”} March 25, 2003.} The report recognizes that retail water supply reliability is dependent on the development of both local resources and supplemental imported water supplies. In addition, the report identifies actual and projected demands for water from MWD, as well as the water supplies available to MWD to meet those demands. In light of reduces Colorado River supplies and water quality constraints on some supplies, options being considered by MWD to secure adequate supplies include full utilization of MWD’s Diamond Valley Lake Reservoir, re-operation of storage and transfer options, enhanced conservation programs, and development of additional local resources. Through allocation of available supply resources and investment in new or expanded supply and storage options, MWD has determined that it will have adequate supplies to meet projected demands through the 20-year planning horizon.

\subsection*{2.2.2 Water Reclamation}

One approach to reducing potable water demand is the use of reclaimed water for irrigation, industrial, and other non-potable uses. Reclaimed water is water that has been used and then treated to a quality suitable for specific non-potable uses while protecting public health. Water reclamation is considered a new water resource intended to reduce the need to develop...
additional potable water supplies. In addition to reducing potable water demand, the use of reclaimed water reduces the amount of wastewater effluent discharged into the ocean.

Currently, the City of Los Angeles reuses a small portion of treated wastewater, primarily for in-plant uses at the treatment plants, irrigation of parks and golf courses, and industrial cooling. In 1990, the City adopted a goal to substantially increase wastewater reclamation up to 250,000 acre-feet per year (AF/yr) in 2010. Working toward this goal, the LADWP presently has plans to recycle approximately 80,000 AF/yr, to meet about 10 percent of the City’s estimated water supply for 2010. In 1991, the State legislature established a goal to reclaim 700,000 AF/yr of water statewide by 2000, and one million AF/yr by 2010.478

The WBMWD operates the West Basin Water Recycling Plant (WBWRP), located approximately seven miles south of the eastern portion of the Proposed Project site in the City of El Segundo. The WBWRP receives approximately 42.5 million gallons per day (mgd) of secondary effluent from the Hyperion Treatment Plant (HTP). This reclaimed water is intended for industrial use, irrigation, and groundwater basin barrier injection. The WBWRP currently treats a total of 42.1 mgd of the secondary effluent for the following applications479: 30 mgd of Title 22 recycled water for irrigation; 7.5 mgd of high quality recycled water for seawater intrusion barrier injection; and, 4.6 mgd of recycled water for use as boiler feed water at local refineries. As discussed above in Subsection 2.1, Regulatory Framework, the RWQCB, using health standards established by the DHS, regulates WBWRP’s Title 22 water. Such irrigation water must meet or exceed the State Title 22 standards for water quality. As a permit condition to procure Title 22 recycled water, the RWQCB requires ongoing monitoring of product water, as well as annual reporting of water quality analysis results. The City of Los Angeles has a contract with WBMWD to both deliver HTP secondary treated effluent water to the WBWRP for tertiary treatment and to be entitled to at least 25,000 AF/yr of reclaimed water for reuse.480 The WBWRP ultimately plans to have a capacity of 100 mgd, producing up to about 100,000 AF/yr of reclaimed water to a variety of users.481

478 Metropolitan Water District of Southern California, Integrated Resources Plan, 1996.
479 The difference in the volume of wastewater treated at WBWRP and the volume of wastewater received from HTP (i.e., 0.4 mgd), is the volume of wastewater solids or brine that is extracted from the influent wastewater during treatment.
481 Hinds, John, Water Resources Planning Section, Los Angeles City Department of Water and Power, Telephone Communication, May 21, 1996.
As part of its “West Basin Water Recycling Project,” WBMWD constructed a pipeline in March 1997 from the WBWRP to Westchester Golf Course, located less than one mile south of the Proposed Project site. An extension along Lincoln Boulevard with a peak demand capacity of 3,700 gallons per minute, portions of which have already been constructed by WBMWD and LADWP, will service the Proposed Project site. The extension would start at 83rd Street and run to Jefferson Boulevard and on to Playa Vista Drive. This pipeline has been constructed from 83rd Street to approximately Hughes Terrace and on Jefferson Boulevard between Lincoln Boulevard and Playa Vista Drive. The remaining portion of the pipeline, Lincoln Boulevard between Hughes Terrace and Jefferson Boulevard, will be coordinated with Caltrans’ Lincoln Boulevard Widening Project.

2.2.3 Water Consumption

As most of the Proposed Project site is vacant land, relatively little water is currently being consumed. There are two buildings within the Proposed Project site, Building 22 and Building 45, which remain from the former Hughes Aircraft Company/McDonnell Douglas Helicopter plant. Building 22 is a 5,500-sq.ft. warehouse used for storage and, as such, only nominal quantities of water are consumed. Building 45 consists of approximately 43,500 sq.ft. and is presently used occasionally for filming (i.e., sound stage), production-related activities, and storage; hence, consumption of water is also nominal. Other small buildings, including sheds, minor storage structures, and construction trailers (associated with development of the adjacent Playa Vista First Phase Project), currently exist within the Proposed Project site. These buildings, although connected to local water service infrastructure, consume only nominal quantities of water.

2.2.4 Water Distribution

The Proposed Project site lies within the 205-foot pressure zone (i.e., the pressure equivalent if the water in the system were at 205 feet above sea level) of the LADWP water supply system. This pressure zone generally encompasses the Venice area, south to the Proposed Project site, west of the San Diego Freeway, but excluding the Marina del Rey area, which is served by the County. All water supplied to this zone is transferred from the adjacent 477-foot pressure zone through three regulator stations, one of which is located north of Venice Boulevard at Grand View Avenue, the second is at Sepulveda Boulevard south of Centinela Avenue, and

482 West Basin Municipal Water District provides recycled water for municipal, commercial and industrial applications via its West Basin Water Recycling Project. The recycling project distributes almost 22,000 acre-feet of recycled water annually to more than 150 sites in the South Bay area (www.westbasin.com).


the third is at Jefferson and Sepulveda Boulevards. These stations reduce pressure from the 477-foot zone to the 205-foot zone. Flows into the 205-foot zone range from about 2 cubic feet per second (cfs) to about 12 cfs. Key transmission mains in the zone include a 25-inch and 20-inch diameter line running in Jefferson Boulevard, Lucille Street, Centinela Avenue a 12-inch water main in Centinela Avenue south of Bluff Creek Drive, and a 16-inch diameter line in Jefferson adjacent to most of the Proposed Project site.

At the present time, there is a limited, privately owned distribution system within the Proposed Project site, serving existing buildings that remain from the former Hughes Aircraft Company/McDonnell Douglas Helicopter plant, both within the Proposed Project site and adjacent to the Project site. This system has a 10-inch connection to the LADWP system near Jefferson Boulevard and Centinela Avenue. The fire protection system, which serves the existing plant buildings within the Proposed Project site and adjacent to the Project site, includes a pump station within the adjacent Playa Vista First Phase Project site, installed in 1988.

In addition, LADWP is completing several major improvements in the general vicinity of Playa Vista that will enhance service to existing customers near the Proposed Project site and provide improved water service availability and delivery.

3.0 IMPACT ANALYSIS

3.1 Methodology

LADWP does not maintain any standard unit demand factors for specific types of land uses. In the absence of any standard water usage factors, water consumption estimates were developed for long-term operational use based on land use wastewater generation factors developed by the City of Los Angeles for the Draft L.A. CEQA Thresholds Guide, with 10 percent added to account for evaporation and absorption losses. Since reclaimed water is used to operate the cooling towers and toilets, the discrepancy between the water consumption factor and the waste generation factor is reflected in an increase of 53 gallons per day/thousand square feet (gpd/ksf) for the wastewater generation factor of office uses. It is assumed that reclaimed water would be used for irrigation of all parks, landscaped medians, common open space and other such landscaped areas. The potable water factors are summarized in Table 161 on page 1084.

485 City of Los Angeles Department of Planning, Final Environmental Impact Report, Playa Vista First Phase Project, May 1993.

During summer months, daily demands by some uses are substantially higher than during winter. Maximum day demands normally occur during hot summer days. For the City of Los Angeles, the maximum day water demand is approximately 1.7 times the average day demand. Furthermore, water demands fluctuate throughout the day; peak periods are typically reached in the later afternoon and/or early evening hours. The highest flow rate during the year is during the peak hour of the maximum day, normally called the peak hour demand. In Los Angeles, peak hour demands are approximately 3 times the average demand.

These three types of demand factors (average day, maximum day, and peak hour) are important relative to the proper functioning of a water supply system. Average demands are used to determine the total annual water supply source requirements; maximum day demands are used to determine the maximum demand on supply sources and to size the capacity of pumping stations and reservoirs; and peak hour demands are important for the sizing of distribution pipelines and the design of reservoirs.

Most of the potable water consumption factors are applied to the square footage of a particular land use. These square footages were obtained from the Project Description, as were the number of residential dwelling units.

Reclaimed water is assumed to be used for landscape irrigation, office building cooling systems, and office building toilets. The irrigation factor for landscaping is assumed to be the

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same for all types of landscaping (i.e., greenbelts, gardens, etc.). This factor is 3,650 gallons per day per acre (gpd/acre), as shown in Table 162 on page 1086. The factors used to estimate maximum day and peak hour irrigation demands are 2.2 and 4.5 times the average consumption, respectively, and are based on an analysis of evapotranspiration data, climatic conditions, and expected irrigation practices, that include a set number of irrigation hours per day, generally at night. As shown in Table 162, the maximum day irrigation demands would be approximately 8,030 gpd/acre and the peak hour irrigation demands would be approximately 11.4 gallons per minute per acre (gpm/acre).

The quantity of reclaimed water used for toilet flushing was calculated by assuming an average of 8 gallons of reclaimed water per employee per day and 4 employees per 1,000 square feet of office space. Reclaimed water used for office building cooling systems was calculated by using a factor of 32 gpd per ksf – the difference between the office building with cooling tower factor (182 gpd/ksf) and the office building without cooling tower factor (150 gpd/ksf), and included 21 gpd/ksf for reclaimed water use associated with office toilets. As such, the office wastewater generation factor, including cooling tower and toilet usage, is 203 gpd/ksf.

3.2 Significance Thresholds

The Draft Los Angeles CEQA Thresholds Guide (p. K.1-3) states that the determination of the significance of impacts on water shall be made on a case-by-case basis considering the following factors:

- The total estimated water demand for the project;
- Whether sufficient capacity exists in the water infrastructure that would serve the project, taking into account the anticipated conditions at project buildout;
- The amount by which the project would cause the projected growth in population, housing, or employment for the Community Plan area to be exceeded in the year of the project completion; and
- The degree to which scheduled water infrastructure improvements or project design features would reduce or offset service impacts.

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Based on these factors the Proposed Project would have a significant impact if:

- The total estimated water demand for the Project at buildout would exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure); or
- The Project would exceed the projected employment, housing, or population growth projections of the applicable Community Plan as assumed in the planning for future water infrastructure needs.

### 3.3 Project Design Features

The Proposed Project would implement water conservation methods such as ultra low-flow toilets, low-flow showerheads, low-flow fixtures and water saving appliances, as required by local law. Although not required by the City or other regulatory agency, the Applicant has established, as part of building design and construction requirements and its Residential Sustainable Performance Guidelines, additional water conservation requirements for the Proposed Project, such as the installation of Energy Star-rated dishwashers and washing machines and, in office, retail and other public buildings, water faucet fixtures with actuators that automatically shut off the flow of water when not in use. Refer to Appendix M-1 for the Residential Sustainable Performance Guidelines.

To the extent supply is available, reclaimed water would be used for landscape irrigation in open space areas such as parks and common open space within development areas. The irrigation systems would include efficiency features such as timers, moisture probes, spray limiters, etc., as practical and appropriate. Reclaimed water would be provided by the WBMWD from its WBWRP.

In addition, reclaimed water, as available, would be used for cooling water (i.e., the make-up water used in cooling towers for commercial/industrial air conditioning systems), and

### Table 162

<table>
<thead>
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<th>Land Use</th>
<th>Average Consumption Factor&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Maximum Day Factor&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Peak Hour Factor&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscape</td>
<td>3,650 gpd/acre</td>
<td>8,030 gpd/acre</td>
<td>11.4 gpm/acre</td>
</tr>
</tbody>
</table>

office building toilets. Such use of reclaimed water is designed to further reduce the Proposed Project’s need for, and consumption of, potable water, beyond the reduction achieved through the implementation of water conservation measures and the use of reclaimed water for irrigation.

3.4 Project Impacts

The Draft Los Angeles CEQA Thresholds Guide identifies four factors to be used in determining the significance of a project’s impacts on water consumption (see Subsection 3.2, above). The first three factors have been established as the Proposed Project’s significance thresholds. The fourth factor is a component of the first significance threshold in that it provides additional guidance in terms of describing a project’s impact on water infrastructure improvements and provides guidance with regard to the methodology used in the analysis. Additionally, information regarding scheduled water infrastructure improvements is provided above in Subsection 2.2, Existing Conditions, while information regarding Project Design Features that reduce or offset service impacts is provided above in Subsection 3.3, Project Design Features.

The following analysis evaluates impacts of the Proposed Project. Because the Habitat Creation/Restoration Component would consume negligible amounts of water during operation, the Proposed Project’s impacts result primarily from the implementation of the Urban Development Component.

3.4.1 Construction Impacts

During construction within the Urban Development Component, water would be used for dust suppression, the mixing and pouring of concrete, and other construction-related activities. In addition to development construction, the Proposed Project’s Habitat Creation/Restoration component would require water for temporary irrigation during plant establishment. This temporary irrigation system would be designed to avoid over-irrigation of the slope areas included within the Proposed Project’s bluff restoration program. It is not possible to quantify the water usage attributable to development construction and plant establishment activities with any level of certainty. Water usage for such purposes would, however, be temporary in nature and would not exceed that of the completed development.

Reclaimed water may be used for dust suppression, temporary irrigation, and various construction-related activities, reducing the use of potable water. It is unlikely that such water use would exceed the available supply, given the current and planned utilization of recycled “product” water serving the Proposed Project site and vicinity (i.e., recycled water customers currently consume only about 60 percent of the water treated at WBWRP, and planned expansions will meet, if not exceed projected demands). No significant impact is anticipated to
occur due to project construction activities because the water demands associated with such activities are not anticipated to exceed available supplies or distribution infrastructure.

### 3.4.2 Operational Impacts

Development within the Urban Development Component would consume water on a long-term basis. The water supply for the long-term operation of the Riparian Corridor would be from groundwater; therefore, the Riparian Corridor would not require ongoing consumption of potable or reclaimed water. As a result, the Proposed Project’s ongoing use of potable and reclaimed water would be limited to that required to support the development proposed to occur within the Urban Development Component.

Table 163 through Table 167 on pages 1089 through 1091 indicate the daily amount of potable (average, maximum day, and peak hour) and reclaimed (office uses and landscape irrigation) water consumption of the Proposed Project at buildout.

With respect to the operation of uses proposed for the Proposed Project site, an estimated total of 0.50 mgd of potable water and 63,589 gpd of reclaimed water would be consumed on an average day, 0.86 mgd of potable water and 135,275 gpd of reclaimed water on a maximum day, and 1,048 gpm of potable water and 189 gpm of reclaimed water during the peak hour, as shown in Table 163 through Table 167 on pages 1089 through 1091. Based on LADWP’s average water demand of 640 mgd projected for the year 2010, for which adequate water supplies are planned, the water consumption associated with the Proposed Project at buildout would represent approximately 0.08 percent of LADWP’s future water demand. As indicated in LADWP’s Water Supply Assessment for the Proposed Project (included as Appendix N-1b to this EIR) it is not anticipated that the total estimated water demand of the Project at buildout would exceed available supplies; hence, a less than significant impact on water supplies is anticipated.

The WBWRP, during fiscal year 2001-2002, sold 27,307 acre-feet (AF) to current customers, although they currently have the capacity to produce a total of approximately 46,485 AF per year. Given treatment capacity expansions planned to be implemented prior to 2010, the projected supply from WBWRP at Project buildout would be 54,000 AF per year (48.2 mgd). As indicated above, the Project would consume approximately 0.06 mgd (about 64,000 gpd) of recycled water during normal operation, which represents approximately 0.1 percent of the available supply at Project buildout in 2010. As such, LADWP and WBMWD, through the Westside Water Recycling Project, are anticipated to have sufficient reclaimed water supply to provide for the demands of the Proposed Project.

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### Table 163

**PROPOSED PROJECT**

**AVERAGE POTABLE WATER CONSUMPTION**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Proposed Project</th>
<th>Potable Water Consumption Factor (a)</th>
<th>Projected Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (d.u.)</td>
<td>2,600</td>
<td>176 gpd/d.u.</td>
<td>457,600 gpd</td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175</td>
<td>165 gpd/ksf</td>
<td>28,875 gpd</td>
</tr>
<tr>
<td>Retail (ksf)</td>
<td>150</td>
<td>88 gpd/ksf</td>
<td>13,200 gpd</td>
</tr>
<tr>
<td>Civic/Inst. (ksf)</td>
<td>40</td>
<td>88 gpd/ksf</td>
<td>3,520 gpd</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>0.503 mgd</strong></td>
</tr>
</tbody>
</table>

\(ksf = \text{thousand square feet}\) \(du = \text{dwelling units}\) \(gpd = \text{gallons per day}\) \(mgd = \text{million gallons per day}\)

\(a\) **Water consumption factors from City of LA Draft CEQA Thresholds Guide (1998), wastewater generation factor multiplied by 110 percent to account for evaporation and absorption losses.**

**Source:** Camp Dresser & McKee, Inc., 2003.

### Table 164

**PROPOSED PROJECT**

**RECLAIMED WATER USAGE (LANDSCAPE)**

<table>
<thead>
<tr>
<th>Land Use (a)</th>
<th>Proposed Project</th>
<th>Reclaimed Water Consumption Factor (b)</th>
<th>Projected Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>3,650 gpd/acre (average)</td>
<td>54,349 gpd</td>
</tr>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>8,030 gpd/acre (maximum day)</td>
<td>119,567 gpd</td>
</tr>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>11.4 gpm/acre (peak hour)</td>
<td>170 gpm</td>
</tr>
</tbody>
</table>

\(gpd = \text{gallons per day}\) \(gpm = \text{gallons per minute}\)

\(a\) **Landscaped acreages determined using height district coverages, with most conservative (largest) amount of landscaped acreage.**


**Source:** Camp Dresser & McKee, Inc., 2003.
### Table 165

**PROPOSED PROJECT**

**RECLAIMED WATER USAGE (OFFICE AND TOTAL CONSUMPTION)**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Proposed Project</th>
<th>Reclaimed Water Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Potable and Reclaimed Water Consumption Factors&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175</td>
<td>53.0 gpd/ksf</td>
</tr>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>3,650.0 gpd/acre</td>
</tr>
<tr>
<td><strong>Average Reclaimed Total&lt;sup&gt;b&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Maximum Day</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175</td>
<td>90.1 gpd/ksf</td>
</tr>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>8,030.0 gpd/acre</td>
</tr>
<tr>
<td><strong>Maximum Day Reclaimed Total&lt;sup&gt;b&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Peak Hour</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175</td>
<td>0.1104 gpm/ksf</td>
</tr>
<tr>
<td>Landscaping (acres)</td>
<td>14.89</td>
<td>11.4 gpm/acre</td>
</tr>
<tr>
<td><strong>Peak Hour Reclaimed Total&lt;sup&gt;b&lt;/sup&gt;</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Water usage factors for toilets and cooling towers are the wastewater generation factors from City of Los Angeles Draft L.A. CEQA Thresholds Guide (1998). Office factor includes 32 gpd per thousand square feet for office cooling towers and 21 gpd for toilet usage. Maximum Day factor is 1.7 times the average factor, and Peak Hour is 3 times the average factor.

<sup>b</sup> This number represents the combined reclaimed water usage from office cooling towers/toilets and landscape irrigation (sum of Table 164 and Table 165 consumption).

*Source: Camp Dresser & McKee, Inc., 2003.*

In order to accommodate the anticipated potable and reclaimed water demands, the construction of infrastructure improvements would be necessary. As described above in Subsection 2.2, Existing Conditions, LADWP is planning to install additional potable and reclaimed water supply mains to provide adequate water for the area, including the Proposed Project. On-site distribution lines would be constructed to serve the proposed development and would be sized according to projected demands, including maximum day demands. In addition, LADWP has indicated that the Proposed Project requires the construction of an off-site regulator station south of Jefferson and Mesmer, and additional funding to be provided to LADWP to ensure the means for LADWP to provide a backup source of water (to be determined.

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<sup>492</sup> City of Los Angeles Department of Water and Power, Letter to Camp Dresser & McKee Inc. dated December 14, 1998, and subsequent telephone communication with Mr. Luis Nuno of the LADWP on March 29, 1999.
### Table 166
**PROPOSED PROJECT**
**MAXIMUM DAY POTABLE WATER CONSUMPTION**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Proposed Project</th>
<th>Potable Water Consumption Factor</th>
<th>Projected Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (d.u.)</td>
<td>2,600</td>
<td>299 gpd/d.u.</td>
<td>777,400 gpd</td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175,000</td>
<td>281 gpd/ksf</td>
<td>49,175 gpd</td>
</tr>
<tr>
<td>Retail (ksf)</td>
<td>150,000</td>
<td>150 gpd/ksf</td>
<td>22,500 gpd</td>
</tr>
<tr>
<td>Civic/Inst. (ksf)</td>
<td>40,000</td>
<td>150 gpd/ksf</td>
<td>6,000 gpd</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>0.86 mgd</strong></td>
</tr>
</tbody>
</table>

ksf = thousand square feet  du = dwelling units  gpd = gallons per day  mgd = million gallons per day

* Water consumption factors are derived from the wastewater generation factors from City of L.A. Draft CEQA Thresholds Guide (1998), multiplied by 110 percent. Multiplied average consumption factor by LADWP Maximum Day peaking factor of 1.7.


### Table 167
**PROPOSED PROJECT**
**PEAK HOUR POTABLE WATER CONSUMPTION**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Proposed Project</th>
<th>Potable Water Consumption Factor</th>
<th>Projected Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (d.u.)</td>
<td>2,600</td>
<td>528 gpd/d.u.</td>
<td>953 gpm</td>
</tr>
<tr>
<td>Office (ksf)</td>
<td>175,000</td>
<td>495 gpd/ksf</td>
<td>60 gpm</td>
</tr>
<tr>
<td>Retail (ksf)</td>
<td>150,000</td>
<td>264 gpd/ksf</td>
<td>28 gpm</td>
</tr>
<tr>
<td>Civic/Inst. (ksf)</td>
<td>40,000</td>
<td>264 gpd/ksf</td>
<td>7 gpm</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>1,048 gpm</strong></td>
</tr>
</tbody>
</table>

ksf = thousand square feet  du = dwelling units  gpd = gallons per day  gpm = gallons per minute

* Water consumption factors from City of L.A. Draft CEQA Thresholds Guide (1998). Factors are derived from the wastewater generation factors (multiplied by 110 percent), then multiplied by the LADWP Peak Hour peaking factor of 3. Gallons per day (gpd) are divided by 24 hours (per day) and then by 60 minutes (per hour) to derive gallons per minute (gpm) flow.


by LADWP at a later date) in the event of disruption in water delivery in the region. (Appendix N-1c of this EIR.) With the implementation of these planned improvements, development of the Proposed Project site would not exceed water distribution infrastructure capabilities; therefore, no significant impact to such facilities would occur.
As discussed previously, the planning for future water supplies to meet regional needs is based primarily on SCAG regional growth projections. The Proposed Project is within the SCAG regional growth projections. Furthermore, Project-associated growth would not conflict with or exceed projections contained in the Westchester-Playa del Rey Community Plan (see Section IV.J, Population, Housing, and Employment, of the EIR, for a discussion of applicable plans, projected growth, and the Proposed Project’s conformance with those projections). As such, the potable water demand associated with development of the Proposed Project has been accounted for in existing water supply planning programs at the local and regional level. Also, as noted above, the water consumption for the Proposed Project would not exceed the available supply. Based on the information provided above, the Proposed Project would result in a less than significant impact as it does not exceed SCAG’s regional projected employment, housing or population growth projections or those of the Westchester-Playa del Rey Community Plan as assumed in the planning for future water infrastructure needs.

In summary, implementation of the Proposed Project would not result in significant impacts related to water consumption. The total estimated potable water demand for the Proposed Project at buildout is not anticipated to exceed available supplies planned by LADWP. With implementation of water distribution system improvements currently planned by LADWP, the water service needs for the Proposed Project would not exceed distribution infrastructure capabilities. Development of the Proposed Project would not exceed the growth projections of the Westchester-Playa del Rey Community Plan, as such projections were used in the planning for future water supplies to meet regional needs. Additionally, the Proposed Project includes a number of water conservation design features that reduce or offset water service impacts. Such features include, but are not limited to, requirements for the use of water efficient appliances and flow control devices, as well as the use of reclaimed water for irrigation and for certain aspects of non-residential building operations.

3.5 Equivalency Program Impacts

The preceding analysis addresses impacts associated with construction and operation of the Proposed Project relative to water consumption, namely, the adequacy of potable and reclaimed water supplies and distribution infrastructure. The proposed Equivalency Program allows for specific limited exchanges in the types of land uses occurring within the Project’s Urban Development Component. No changes are proposed under the Equivalency Program to the Project’s Habitat Creation/Restoration Component.

Water consumption impacts pertaining to construction activities under the Equivalency Program would be nearly identical to those that would occur under the Proposed Project and would not result in increased water consumption impacts, given the similarity in nature and intensity of construction activities under both development scenarios. Furthermore, operational impacts to distribution infrastructure (potable and reclaimed water infrastructure) under the
Equivalency Program would be similar to the Proposed Project, as LADWP oversight of design and planning of water distribution infrastructure under the Equivalency Program (i.e., to ensure system adequacy) would still occur. Reclaimed water consumption impacts during operation of land uses under the Equivalency Program would be reduced relative to the Proposed Project, given the same landscaped area but reduced office uses, which would consume proportionately less reclaimed water for toilets and cooling towers. Additionally, based on the fact that the allowable number of assisted living units under the Equivalency Program (i.e., 200 units) would result in a maximum population growth of 240 persons (i.e., 1.2 persons per unit on average), the growth projected to occur under the Equivalency Program would essentially be comparable to that of the Proposed Project. As such, construction impacts, as well as operational impacts related to distribution infrastructure, reclaimed water supply, and consistency with applicable land use plans would be less than significant under the Equivalency Program, as is the case with the Proposed Project, since the total estimated water demand at buildout would not exceed available reclaimed water supplies or potable/reclaimed distribution infrastructure capabilities, and would not exceed the projected employment, housing, or population growth projections of the applicable Community Plan as assumed in the planning for future water infrastructure needs.

Operational potable water consumption under the Equivalency Program would, under some development scenarios (i.e., variations in office, retail, and assisted living development patterns, while residential and community-serving would be unchanged), result in greater potable water supply impacts than under the Proposed Project. As shown in Table 168 on page 1094, potable water consumption would increase under two of the three analyzed land use development scenarios under the Equivalency Program. The first scenario under the Equivalency Program (i.e., All Retail), in which no assisted living units would be developed and the reduced office uses would be transferred to retail development, would consume 0.487 mgd on an average day and 0.829 mgd on a maximum day, which represents a decrease of approximately 0.016 mgd and 0.026 mgd (3.1 percent decrease) for an average and maximum day, respectively, from Proposed Project consumption. Under the second scenario (i.e., All Assisted Living), in which retail uses would be equal to those under the Proposed Project, yet in which the maximum number of assisted living units are constructed and office uses are reduced, water consumption would be increased over that which would occur under the Proposed Project. As Table 168 illustrates, the All Assisted Living scenario would result in the consumption of 0.527 mgd on an average day and 0.895 mgd on a maximum day, which represents an increase of 0.024 mgd and 0.040 mgd (4.7 percent increase) over the Proposed Project, respectively. The analysis of the Equivalency Program also considered other equivalency scenarios in which some proportion of assisted living units and retail development would be constructed while office uses would be minimized (as in the first scenario). Under these equivalency scenarios, the amount of water consumption would vary depending on the amount of retail and assisted living units constructed. Based on an analysis of a number of different equivalency scenarios, the greatest water consumption would occur when the maximum number of assisted living units (i.e., 200 units) are constructed, due to the fact that such uses are more water-intensive than retail uses. As such, as illustrated in Table
168, the water consumption under the Retail/Assisted Living scenario of the Equivalency Program would be 0.514 mgd on an average day and 0.874 on a maximum day, which represents an increase of 0.011 mgd and 0.019 mgd (2.2 percent increase) over the Proposed Project.

Overall, based on the fact that, compared to the Proposed Project, the fluctuations in potable water consumption under all development scenarios of the Equivalency Program are equal to or less than 4.7 percent, the impacts relative to the Proposed Project are not substantial. Furthermore, implementation of applicable Project Design Features (as discussed above in Subsection 3.3, Project Design Features) and Project mitigation measures would minimize potable water consumption to the maximum extent practicable. As such, the total estimated potable water demand at buildout would not exceed available potable water supplies or

### Table 168

**AVERAGE AND MAXIMUM DAY POTABLE WATER CONSUMPTION – PROPOSED PROJECT AND EQUIVALENCY SCENARIOS**

| Land Use                          | Consump- | Equivalency Scenario: All Retail | Equivalency Scenario: All Assisted Living | Equivalency Scenario: Retail/Assisted Living |
|-----------------------------------| Factor   | Amount of Development | Amount of Consumption | Amount of Development | Amount of Consumption |
| Average Potable Water Consumption (gpd) |         |                        |                           |                           |                           |
| Residential (d.u.)                | 176      | 2,600                  | 457,600                   | 2,600                     | 457,600                   |
| Office (ksf)                      | 165      | 50                     | 8,250                     | 150.90                    | 24,899                    |
| Retail (ksf)                      | 88       | 206.832                | 18,201                    | 150                       | 13,200                    |
| Community Serving (ksf)           | 88       | 40                     | 3,520                     | 40                        | 3,520                     |
| Assisted Living (units/rooms)    | 137.5    | 0                      | 0                         | 200                       | 27,500                    |
| **Total**                         |          | **487,571**            | **526,719**               | **514,107**               |
| Proposed Project                  |          |                        |                           |                           |                           |
| **Over/(Under) Proposed Project** | (15,624)| **23,524**             | **19,512**                |                           |

| Maximum Day Potable Water Consumption (gpd) |         |                        |                           |                           |                           |
| Residential (d.u.)                | 299      | 2,600                  | 777,400                   | 2,600                     | 777,400                   |
| Office (ksf)                      | 281      | 50                     | 14,050                    | 150.90                    | 42,403                    |
| Retail (ksf)                      | 150      | 206.832                | 31,025                    | 150                       | 22,500                    |
| Community Serving (ksf)           | 150      | 40                     | 6,000                     | 40                        | 6,000                     |
| Assisted Living (units/rooms)    | 234      | 0                      | 0                         | 200                       | 46,800                    |
| **Total**                         |          | **828,475**            | **895,103**               | **873,632**               |
| Proposed Project                  |          |                        |                           |                           |                           |
| **Over/(Under) Proposed Project** | (26,600)| **40,028**             | **18,557**                |                           |

**Notes:** gpd = gallons per day; mgd = million gallons per day; ksf = thousand square feet; d.u. = dwelling unit

**Source:** Camp Dresser & McKee, Inc., 2003.
distribution infrastructure capabilities, and impacts under the Equivalency Program, as is the case with the Proposed Project, would be less than significant.

### 3.6 Impacts of Off-Site Improvements

Proposed Project development could result in secondary impacts arising from implementation of the Project’s mitigation measures, as well as the direct impacts described above. Mitigation measures within Section IV.K.(1), Traffic and Circulation, require physical improvements in transportation facilities at numerous locations including roadway widening at seven locations, as described in Subsection 5.8 of that Section. In addition, as discussed in the mitigation section below, the Proposed Project would require the construction of a water regulator station in the vicinity of Jefferson Boulevard and Mesmer Avenue. These off-site improvements are all located in developed urban areas. All of the off-site improvements, with the exception of the water regulator station, would occur within, or adjacent to, existing roadways. The water regulator station includes a small amount of above-ground piping equipment, a common element of the urban environment. Implementation of the Project’s mitigation measures does not involve the construction of any buildings.

Construction of the proposed off-site traffic improvements would not require significant quantities of potable or reclaimed water, with the exception of water used for dust control. Operation of the proposed improvements would not consume potable or reclaimed water supplies. As such, construction and operation of the roadway improvements would not require new water supply or distribution facilities or infrastructure, or necessitate expansion of such facilities/infrastructure. Further, the proposed improvements would not add permanent residential or employment population and, therefore, would not increase the demand for, or consumption of, water. While construction activities would require the use of water, the amount would not be significant so as to reduce the overall amount of water available for public water supplies. No significant impact is expected, and no mitigation measures would be required.

As such, construction and operation of proposed off-site improvements would result in less than significant water consumption impacts, as the total estimated water demand for the Project at buildout would not exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure), and would not exceed the projected employment, housing, or population growth projections of the applicable Community Plan as assumed in the planning for future water infrastructure needs.
4.0 MITIGATION MEASURES

Mitigation Measures for the Proposed Project and the Equivalency Program

- Prior to issuance of any building permit, on and off-site water infrastructure for potable and recycled water necessary for the development approved under such permit shall be constructed or suitably guaranteed, satisfactory to the City of Los Angeles’ Department of Water and Power, Department of Public Works, and Department of Transportation; California Department of Health Service and Department of Transportation (Caltrans); and the West Basin Municipal Water District, as applicable. Off-site water infrastructure shall consist of construction of a regulator station south of the Jefferson Boulevard/Mesmer Street intersection and provision of design and construction fees to provide a back-up source of emergency water supply to serve the project area.

- The Project shall install low-flow toilets, low-flow showerheads, low-flow fixtures, and Energy Star-rated appliances (dishwashers and washing machines, if built in), where applicable.

- In office, retail, and other public buildings, water faucet fixtures with activators shall be installed that automatically shut off the flow of water when not in use.

- If available, reclaimed water shall be used for irrigation, office building toilet flushing, and office building cooling towers.

- Compliance with all applicable water conservation ordinances (No. 170,978 and subsequent ordinances) shall be required.

- Automatic sprinkler systems shall be set to irrigate landscaping during early morning hours or during the evening to reduce water losses from evaporation. Sprinklers shall be reset to water less often in cooler months and during the rainfall season so that water is not wasted by excessive landscape irrigation.

5.0 UNAVOIDABLE ADVERSE IMPACTS

The total estimated water demand for the Project at buildout, inclusive of the Project’s Equivalency Program and off-site improvements, is not anticipated to exceed available supplies or distribution infrastructure capabilities (i.e., water infrastructure), or exceed the projected employment, housing, or population growth projections of the applicable Community Plan, as assumed in the planning for future water infrastructure needs. Therefore, no significant unavoidable adverse impacts relative to water consumption are expected to occur.
6.0 CUMULATIVE IMPACTS

As shown in Table 169 on page 1098, the projected potable water consumption for the Proposed Project in conjunction with that of cumulative projects within the LADWP service area and other background growth would be 4.81 mgd on an average day, 8.17 mgd on a maximum day, and 10,015 gpm during a peak hour. This would represent an increase of approximately 0.8 percent in LADWP’s average daily water demand of 640 mgd (daily average consumption, normal year) projected for the year 2010. The Project’s Equivalency Program would create a maximum additional average and maximum day potable water demand of 23,524 gpd and 40,028 gpd, respectively, which represents an increase of 0.5 percent. Detailed calculation spreadsheets of water consumption for the cumulative projects are presented in (Appendix N-1a of this EIR).

Major improvements necessary to provide adequate service to the Proposed Project have been previously identified by LADWP; as such off-site water system infrastructure is anticipated to be adequate to meet the water demands of the Proposed Project, including the Project’s Equivalency Program and off-site improvements, by 2010. It is uncertain, however, if such improvements have also been identified for the cumulative projects and other background growth addressed herein, since many of the related projects are located outside of the LADWP service area. As such, development of the cumulative projects and other background growth would have a potentially significant impact on the local infrastructure. However, this impact would be mitigated by the City requirement that, prior to issuance of a building permit, all projects must demonstrate that adequate distribution infrastructure exists to serve projected demand; if such adequacy cannot be demonstrated by the project applicant, the project cannot connect to the LADWP water distribution system, thereby avoiding a significant impact. As discussed previously, the planning for future water supplies to meet regional needs is based primarily on growth assumptions reflected in local general plans. The level of development associated with the cumulative projects is within SCAG regional growth projections for the area. As such, the potable water demand associated with such development has been accounted for in existing regional water supply planning programs, and no significant cumulative impact to regional water supply is considered to occur. However, at the local level, the population, housing, and employment growth projections reflected in the applicable Community Plan (i.e., the Westchester-Playa del Rey Community Plan) would be exceeded in 2010 by 77.4 percent, 149.9 percent, and 73.0 percent, respectively, based on the growth associated with the Proposed Project and other related projects within the Community Plan area. (see Section IV.J, Population, Housing, and Employment for a detailed discussion of growth projections). Therefore, although no significant cumulative impact to regional water supply would occur, the cumulative impacts of the Proposed Project, including the Equivalency Program, relative to local population growth
### Table 169

**CUMULATIVE WATER CONSUMPTION**

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Proposed Project</th>
<th>Related Projects within LADWP Service Area*</th>
<th>Background Growth</th>
<th>Proposed + Related Projects + Background Growth</th>
<th>Consumption Factor b</th>
<th>Units</th>
<th>Proposed Project</th>
<th>Related Projects within LADWP Service Area*</th>
<th>Background Growth</th>
<th>Proposed + Related Projects + Background Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential (d.u.)</td>
<td>2,600</td>
<td>5,718</td>
<td>2,080</td>
<td>10,398</td>
<td>176</td>
<td>gpd/d.u.</td>
<td>0.458</td>
<td>1.006</td>
<td>0.366</td>
<td>1.830</td>
</tr>
<tr>
<td>Office (s.f.)</td>
<td>175,000</td>
<td>5,918,796</td>
<td>609,380</td>
<td>6,703,176</td>
<td>0.165</td>
<td>gpd/s.f.</td>
<td>0.029</td>
<td>0.977</td>
<td>0.101</td>
<td>1.106</td>
</tr>
<tr>
<td>Retail (s.f.)</td>
<td>150,000</td>
<td>726,564</td>
<td>87,656</td>
<td>964,220</td>
<td>0.088</td>
<td>gpd/s.f.</td>
<td>0.013</td>
<td>0.064</td>
<td>0.008</td>
<td>0.085</td>
</tr>
<tr>
<td>Hotel (rooms)</td>
<td>0</td>
<td>1,650</td>
<td>165</td>
<td>1,815</td>
<td>143</td>
<td>gpd/room</td>
<td>0.000</td>
<td>0.236</td>
<td>0.024</td>
<td>0.260</td>
</tr>
<tr>
<td>Civic/Inst. (s.f.)</td>
<td>40,000</td>
<td>389,300</td>
<td>42,930</td>
<td>472,230</td>
<td>0.088</td>
<td>gpd/s.f.</td>
<td>0.004</td>
<td>0.034</td>
<td>0.004</td>
<td>0.042</td>
</tr>
<tr>
<td>Warehouse (s.f.)</td>
<td>0</td>
<td>190,000</td>
<td>19,000</td>
<td>209,000</td>
<td>0.022</td>
<td>gpd/s.f.</td>
<td>0.000</td>
<td>0.004</td>
<td>0.000</td>
<td>0.005</td>
</tr>
<tr>
<td>Restaurant (s.f.)</td>
<td>0</td>
<td>60,909</td>
<td>6,091</td>
<td>67,000</td>
<td>1.012</td>
<td>gpd/s.f.</td>
<td>0.000</td>
<td>0.062</td>
<td>0.006</td>
<td>0.068</td>
</tr>
<tr>
<td>Theater (seats)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4.4</td>
<td>gpd/seat</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Industrial (s.f.)</td>
<td>0</td>
<td>14,593,500</td>
<td>1,459,350</td>
<td>16,052,850</td>
<td>0.088</td>
<td>gpd/s.f.</td>
<td>0.000</td>
<td>1.284</td>
<td>0.128</td>
<td>1.413</td>
</tr>
<tr>
<td>Parking (spaces)</td>
<td>0</td>
<td>1,815</td>
<td>182</td>
<td>1,997</td>
<td>0</td>
<td>gpd/space</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Total (Average)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>0.503</strong></td>
<td><strong>3.667</strong></td>
<td><strong>0.637</strong></td>
<td><strong>4.807</strong></td>
</tr>
<tr>
<td><strong>Total (Max Day)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>8.172</strong></td>
<td></td>
<td></td>
<td><strong>10,015</strong></td>
</tr>
<tr>
<td><strong>Total (Peak Hour) (gpm)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**gpd = gallons per day  gpm = gallons per minute  mgd = million gallons per day  d.u. = dwelling unit  s.f. = square feet**

Consumption factors are derived from the City of Los Angeles Draft CEQA Thresholds Guide (1998), using wastewater generation factors, multiplied by 110 percent to account for evaporation/absorption losses.

* Related projects within the LADWP service area would utilize the same collective water supply sources, which are the basis for cumulative impacts analysis; all such projects are those within the City of Los Angeles, which are assumed to be served by LADWP.

* Background growth adds 25 percent for residential development and 10 percent for non-residential development (all other uses) to consumption/generation totals to account for growth of related projects that are not subject to environmental review. In other words, residential consumption/generation rates are 25 percent higher and all other rates are 10 percent higher than would otherwise be quantified. See Appendix N-1a for detailed background growth calculations.

* Generation/consumption factors were derived assuming 23 ft\(^2\) for each theater seat, 33 ft\(^2\) for each restaurant seat, 850 ft\(^2\) for each hotel room, 212 ft\(^2\) for each school student, and 154 ft\(^2\) for each parking space. See Appendix N-4 for detailed factor derivations.

* Under the Project’s Equivalency Program, the total cumulative potable water consumption under average and maximum day conditions would increase by a maximum of 23,524 gpd and 40,028 gpd, respectively, which represents an increase of 0.5 percent over the total cumulative consumption of 4.807 mgd (average) and 8,172 mgd (max day).

Source: Camp Dresser & McKee Inc. 2003
would be considered significant. The Project’s off-site improvements would not create additional population or induce population growth directly or indirectly, and would therefore not result in any impacts on water consumption. As such, cumulative impacts associated with off-site improvements would be less than significant.

As discussed in Subsection 2.1, Regulatory Framework, LADWP, as a public water service provider, is required to prepare and periodically update a UWMP to plan and provide for water supplies to serve existing and projected demands. The UWMP prepared by LADWP accounts for existing development within the City as well as projected growth anticipated to occur through redevelopment of existing uses and development of new uses. Additionally, under the provisions of SB 610 (Costa) and SB 221 (Keuhl), LADWP is required to prepare a comprehensive water supply assessment for every new development “project” (as defined by Section 10912 of the Water Code) within its service area. The types of projects subject to the requirements of SB 610 and SB 221 tend to be larger projects (i.e., residential projects with more than 500 dwelling units, shopping centers employing more than 1,000 persons or having more than 500,000 square feet of floor space, commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space, etc.) that may, or may not have, been included within the growth projections of the UWMP. The water supply assessment for such projects, in conformance with the UWMP, evaluates the quality and reliability of existing and projected water supplies, as well as alternative sources of water supply and how they would be secured if needed. Given that the UWMP plans and provides for water supplies to serve existing and projected needs, including those of future growth and development as may occur through projects such as those identified in Table 169 on page 1098, and that the requirements of SB 610 and SB 221 provide means to ensure that the water supply needs of notable development projects have been carefully considered relative to LADWP’s ability to adequately meet future needs, it is anticipated that LADWP will be able to supply the demands of the Proposed Project and related projects through 2010 and beyond.