

3. Water Supply

Existing Conditions

Water Supply

The Los Angeles Department of Water and Power (LADWP) currently supplies water to the proposed Project site. The LADWP acquires its water supply from three sources including, the Los Angeles Aqueduct (LAA), the Metropolitan Water District of Southern California (MWD) and local ground water.⁵⁶ The LAA has supplied the LADWP with approximately half of the City's water over the last 10 years. The MWD is the largest wholesaler of water in California. On average, the MWD has provided the City with 35 percent of its water supply. Water delivered by the MWD comes from the Colorado River and Northern California's Bay-Delta. The City is entitled to 110,000 AF per year of local groundwater supplies from the San Fernando Basin (SFB), Central, Sylmar and West Coast groundwater basins. Local wells have produced an average of 99,750 AF per year⁵⁷, accounting for approximately 15 percent of the City's water supply. About 80 percent of the local groundwater supplied to the City of Los Angeles is provided by the SFB.

Los Angeles Aqueduct

The LAA is an important water resource for the LADWP due to its ability to provide the highest quality water at the lowest cost. Historic provision of water from the Mono Basin and Owens Valley has resulted in degradation of the natural environment. Consequently, the amount of water delivered from these sources will be reduced in order to protect the environment. The reduction in flows from the Mono Basin will be used to raise the level of Mono Lake. Other projects will include mitigating air quality problems in Owens Lake and re-watering a 60-mile stretch of the Owens River for a warm-water fishery. The LAA is expected to provide approximately 321,000 AF per year or 40 percent of the City's average year water supply for the next 20 years. At a current total annual water demand of approximately 665,000 AF, the LAA supplies on average 332,500 AF (50%). LADWP continues to search and improve LAA supplies.

For fiscal year ending 2001, the LAA delivered 238,997 AF to the City, which was 35 percent of total supply. This is 79 percent of the normal LAA delivery over the past ten years. LAA water deliveries fluctuate because the system is primarily fed by snowmelt runoff that varies with hydrologic conditions in the Eastern Sierra Nevada (*LADWP Urban Water Management Plan Annual Update 2001*).

Metropolitan Water District of Southern California

The MWD is a State-chartered association of Southern California water agencies responsible for supplying supplemental water needs to the entire region. The MWD has provided water to the City for nearly 60 years, and will continue to be a primary provider into the future. The LADWP expects that by the year 2020, MWD will provide the City with approximately 300,000 AF per year, or 38 percent of the City's normal water needs, and possibly as much as 60 percent in drought years.

LADWP purchased 343,396 AF from MWD, which was 51 percent of the City's total supply, during fiscal year 2001. LADWP purchases made up approximately 16% of MWD's total water sales to the Southern California region. The fact that the City has been able to rely on MWD to consistently meet its supplemental water needs underscores the importance of MWD to LADWP, and the value of the investments that the City and other member agencies have made to enable MWD to provide for regional water reliability.

⁵⁶ Source: The Los Angeles Department of Water and Power, Urban Water Management Plan, 2000 and Urban Water Management Plan Annual Update, 2001.

⁵⁷ Source: Los Angeles Department of Water and Power, Information Request Letter, dated February 28, 2002.

Currently, the MWD is developing a strategic plan for the equitable distribution of water in Southern California to ensure the ability to meet increasing demands. This plan will focus on guidelines for water shortage allocation and alterations to the rate structure for agencies seeking allocation using MWD facilities. The City and the MWD are also working together to find ways to ensure the reliability of resources through plans aimed at MWD sources.

LADWP is working with MWD and other interested parties to implement California's Colorado River Water Use Plan (California Plan), a strategy that would ensure that California meets its water needs while reducing its reliance on Colorado River surplus waters. California has been using on average 5.2 million AF of Colorado River water, which includes the state's basic entitlement of 4.4 million AF, plus its entitlement of surplus supplies. Current plans to bring California's Colorado River water usage to 4.4 million AF in those years when surplus water is unavailable include water transfer, storage, and exchange agreements.

The CalFed Bay-Delta Program is a cooperative inter-agency group that is attempting to provide solutions for ecosystem problems in San Francisco Bay and the Sacramento-San Joaquin River Delta. In addition to their environmental efforts, the CalFed Bay-Delta Program is working to increase the reliability of supply from the State Water Project and better the quality of the water.

Local Wells

In fiscal year ending 2001, local groundwater sources supplied 85,067 AF of water to the City, 13 percent of the City's total supply. This is about 47,200 AF less than fiscal year 2000. San Fernando Basin groundwater accounted for 68,985 AF of the total amount. Wells in the Central and Sylmar Basins made up the City's remaining groundwater resources, contributing 16,082 AF.

The City holds water rights in four groundwater basins: San Fernando, Sylmar, Central, and West Coast. Annual groundwater entitlements in these basins total approximately 110,000 AF. LADWP plans to continue to maximize production from its groundwater basins in the coming years to offset reductions in imported supplies. Due to poor water quality, the City has not extracted water from the West Coast Basin.

The City's accumulated stored water credit in the San Fernando Basin was 208,609 AF as of October 2000. This is water the City can rely upon in case of a drought or emergency, and is in addition to the roughly 90,000 AF per year entitlement.

Recycled Water

Development of recycled water programs will be a beneficial source of water to the LADWP, that will one day provide a significant amount of water for non-potable uses. The LADWP is working to develop a water-recycling program capable and is on target to reach its goal of recycling 10 percent of total demand by 2010.

Citywide Water Usage

Water from the three primary sources mentioned above is dispersed throughout the City providing water to an array of land uses. For fiscal year 2001, 36 percent of all water used in the City was consumed by single-family residential homes. The remaining water was consumed by multi-family residential (29 percent), commercial (17 percent), governmental (six percent), industrial (three percent), and unaccounted usage (nine percent). This proportioning of the water supply has changed less than one percent over the last ten years, and is assumed to continue into the future.

Despite conservation efforts to reduce the amount of water used each year, increasing population within the City is increasing demands on available water supplies. By the year 2020, water use within the City is expected to grow from 665,695 AF per year (2001) to 800,000 AF per year. The LAA

and the local groundwater sources would supply the majority of water to serve new development, through the DWP. The MWD would supply the remaining demand and is expected to have adequate resources to fulfill the 2020 demand.

Existing Consumption

Currently the area to be redeveloped is developed with a mix of land uses including office (287,701 sf), theater (148,481 sf), restaurant (144,390 sf), retail (57,316 sf), and health club (40,934 sf). Based on a water consumption analysis prepared by the LADWP (**Appendix 14**), water demand generated from the existing land uses is approximately 61 AF per year or an average daily demand of 54,351 gallons of water per day (GPD) seven days per week, as shown in **Table V.N.3-1**. This determination is based upon year 2000 water billings. A percentage of the existing supply and infrastructure capacity serving the area around the Project site is allocated to the existing land uses. Development of the Project would include the removal of all existing land uses, within the area to be redeveloped, prior to construction. The consumption of water from existing land uses will be subtracted from the Project's contribution as a means of accurately calculating the net increase as a result of the Project.

Existing Infrastructure

The LADWP presently maintains the following water mains around the Project area: 8" cast iron main within Constellation Boulevard; 12" cast iron and steel main within Avenue of the Stars; and 12" cast iron mains in both Olympic Boulevard and Century Park East.

Threshold of Significance

Based upon criteria established in the City of Los Angeles Draft CEQA Thresholds Guide (1998), the Project would result in a significant impact if:

- Water supply resources are not available to meet the Project's water supply demand; or
- Existing water infrastructure in the vicinity of the Project do not have sufficient capacity to deliver the Project's water supply.

Project Impacts

The proposed water consumption from the Project is provided in the water consumption analysis prepared by the LADWP (**Appendix 14**). Based on the analysis, the proposed Project would consume 82 AF per year or an average daily demand of 73,062 GPD, as shown in **Table V.N.3-1**. The LADWP has determined that a 35% increase in water demand from 61 AF to 82 AF per year is consistent with projected growth in water demand outlined in LADWP's year 2000 Urban Water Management Plan Update. The LADWP has further indicated that estimated water needs of the Project could be met by the existing water system.⁵⁸ Therefore, the Project would not result in a significant impact on water supply.

⁵⁸ City of Los Angeles Department of Water and Power, letter dated May 15, 2002.

Table V.N.3-1
Existing and Proposed Water Demand

	Square Footage	Acre Feet Per Year	Average Daily Water Use (GPD) ^(a)
Proposed	778,947	82.0	73,063
Existing	678,822	61.0 ^(b)	54,351
Net Total		21.0	18,712

^(a) Average daily demand is calculated by computing Acre feet per year into gallons per year and dividing by 365. The formula is:
 $[(AFY/365days) \times (1 CF/0.000023 AF) \times (7.48 gallons/1 CF)] = (average\ gallons/day)$

^(b) Based on year 2000 Billed Water Usage at 100 percent occupancy.
 Source: LADWP Water Availability Assessment for 2000 Avenue of the Stars, May 2002

Mitigation Measures

Although Project impacts are less than significant, the following mitigation measures would help to further reduce impacts:

- U-16** The proposed Project shall use automatic sprinkler systems for landscape irrigation, which are adjusted on a seasonal basis to operate during hours where water loss due to evaporation would be minimized.
- U-17** Where feasible, reclaimed water shall be used to irrigate landscaped areas.
- U-18** The proposed Project shall comply with all sections of the City of Los Angeles' Water Conservation Ordinance (Ordinance No. 166,080) and Xeriscape Ordinance, as applicable.
- U-19** The proposed Project shall use lower-volume water faucets and water saving showerheads in all construction.
- U-20** The proposed Project shall use plumbing fixtures that reduce potential water loss from leakage due to excessive wear of washers.
- U-21** The proposed Project shall incorporate water conservation measures as appropriate and required by the City of Los Angeles Department of Building Ordinances (No. 163,532, No. 164,093, and No. 165,004) and subsequent amendments, which include the installation of low-flow water fixtures and xeriscape.

Significant Project Impacts After Mitigation

The proposed Project would not generate significant adverse impacts to water supply and infrastructure.

Cumulative Impact

Implementation of all projects within the related project list would result in the consumption of approximately 597 AF per year. Calculation of this number is shown in **Table V.N.3-2**. The addition of the proposed Project would result in a net water consumption of 618 AF per year. According to the LADWP Urban Water Management Plan, by the year 2020, water use within the City is expected to grow from 665,695 AF per year (2001) to 800,000 AF per year. The cumulative increase in water demand from related projects is consistent with projected growth in water demand outlined in LADWP's year 2000 Urban Water Management Plan Update. Improvements to the local infrastructure may be required to serve the related projects, and should be evaluated on a project-by-project basis. Although cumulative impacts may be significant, they are expected to be mitigated on a project by-

project fair share basis. Assuming that the related projects comply with the City's required water conservation policies, the impact on water supply would be considered less than significant.

**INSERT TABLE V.N.3-2
DAILY WATER DEMAND FROM RELATED PROJECTS**