
IV. ENVIRONMENTAL IMPACT ANALYSIS

L. UTILITIES AND SERVICE SYSTEMS

1. WATER

ENVIRONMENTAL SETTING

Regional Water Supply

The City of Los Angeles Department of Water and Power (DWP) is responsible for ensuring that water demand within the City is met and that State and federal water quality standards are achieved. For the fiscal year of 2001-2002, City water supplies were derived from the following sources: (1) the Los Angeles Aqueduct, approximately 34 percent; (2) groundwater, approximately 11 percent; and (3) purchases from the Metropolitan Water District (MWD), approximately 55 percent.¹ The amount of water obtained from these sources varies from year to year, and is primarily dependent on weather conditions and demand.

Water storage is essential for the DWP to supply water during high demand conditions and provide for firefighting and emergencies. The City water system includes 104 tanks and reservoirs ranging in size from 10,000 to 60 billion gallons with a total capacity of 109 billion gallons.² In addition to State regulations, the DWP has instituted its own water conservation measures, including:

- “Water Closet, Urinal and Showerhead Regulations” (LAMC Sections 122.00–122.10) – Reduces water consumption by requiring new buildings to include water conservation fixtures (such as ultra-low flush toilets, urinals, taps, and showerheads) and plumbing fixtures that reduce water loss from leakage in order to obtain City building permits. In addition, there are provisions requiring xeriscaping (i.e., the use of low-maintenance, drought-resistant plants).
- “The Emergency Water Conservation Plan of the City of Los Angeles” (LAMC Sections 121.00-121.13) – Provides for the implementation of a citywide phased water conservation program to respond to dry weather periods based on the DWP’s evaluation of the projected supply and demand of City water supplies. The phased conservation program provides for mandatory water conservation measures at the user level and customer use curtailment of normal water usage.

¹ City of Los Angeles Department of Water and Power, *Urban Water Management Plan, Fiscal Year 2001-2002 Annual Update*.

² City of Los Angeles, *Draft L.A. CEQA Thresholds Guide, May 1998*.

- The DWP is also continuing its water recycling efforts to reduce further the demand on imported water.³

Local Water Supply

The project site is currently undeveloped with no water facilities in the area. The nearest existing water line is a DWP 16-inch main located on La Tuna Canyon Road, approximately 6,000 feet west of the intersection of Interstate 210 and La Tuna Canyon Road. There is also a DWP water tank and main located on Estepa Drive northeast of the project site.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, a significant impact on water services would occur if a project would require or result in the construction of new water facilities or expansion of existing facilities and/or if there were insufficient water supplies available.

Project Impacts

The proposed project would generate short-term construction-related demand for water for such activities as dust suppression and the washing of construction vehicles. In the early stages of grading, prior to the extension of water lines to the project site, it would be necessary to haul water by trucks to the construction area. A typical water truck can carry between 2,000 and 3,000 gallons. During the peak of grading, as many as four water trucks may be simultaneously in use and each truck may refill its tank several times during a typical day. While it cannot be predicted with certainty how many times a truck may need to refill its tank, for the purposes of estimating the magnitude of construction-related water consumption, it is estimated that each truck could go through three tanks during a typical work day. Consequently, it is estimated that peak construction-related water consumption would be approximately 36,000 gallons per day.⁴ During later phases of construction (such as during home construction) the demand for construction-related water can be expected to substantially taper off.

Operationally, the proposed project would create a demand for water for domestic purposes and landscape irrigation. Total occupancy of the proposed project would result in the demand for

³ City of Los Angeles, Department of Water and Power, *Urban Water Management Plan, Fiscal Year 2001-2002 Annual Update*, page 12.

⁴ Four trucks, each with an average capacity of 3,000 gallons, dispensing 3 tank loads per day = 36,000 gallons.

approximately 110,880 gallons per day (gpd) of water (see Table IV.L-1). Water consumption for the proposed project was estimated from wastewater generation factors. In order to present a conservative analysis, water consumption is assumed to be 120 percent of the wastewater generated for a given land use.

As there is no existing water infrastructure on the project site, water lines would need to be extended to the project site. All water mains to and within the project site must be designed and constructed in accordance with DWP and LAFD standards. Additionally, the proposed project would be required to provide two 1.5 million gallon tanks.⁵ The exact locations of the tanks would be determined in consultation with the DWP before building permits would be issued. It is likely, however, that one water tank would be located northeast of the project site adjacent to an existing DWP tank on Estepa Drive, at an elevation of approximately 2,200 feet. Water from this new 1.5 million gallon water tank would be delivered to Development Area A via a new water main constructed within the Inspiration Way public right-of-way. The second water tank would likely be located within the northern portion of Development Area A at an elevation of approximately 1,900 feet. To supply the two new water tanks, the existing 16-inch water main located within the La Tuna Canyon Road right-of-way would be extended approximately 5,000 feet to the project site.

Table IV.L-1
Water Consumption
Canyon Hills Project

Land Use	Size (du)	Consumption Rate (gallons/du/day) ^a	Total Consumption (gpd)
Single-Family Residential	280	396	110,880
^a City of Los Angeles Bureau of Engineering.			

During construction of the water lines within public street right-of-ways, short-term traffic and access impacts could occur. Such impacts could consist of temporary partial or complete lane closures as trenches are excavated, the pipes installed, and the trenches subsequently refilled and covered over. The 5,000-foot extension of the water line in the La Tuna Canyon public right-of-way is expected to take approximately one week to complete. During this time, possible disruptions to the flow of traffic could be a temporary nuisance. However, the construction would not require complete roadway closures and no detours are anticipated. Nevertheless, flagpersons would be used to facilitate traffic

⁵ Correspondence with the Los Angeles Department of Water and Power, Charles C. Holloway, Supervisor Environmental Assessment, March 19, 2003.

flow if the construction required temporary lane closures. No significant construction-related impacts are expected.

In order to comply with existing City water conservation ordinances and to reduce the proposed project's water demand, the new development would be equipped with water conservation devices (e.g., showerheads, toilets, faucets, etc.). The DWP also has a water conservation program that reduces annual water demand by more than 15 percent. This would be accomplished by the installation of ultra-low-flush toilets and high efficiency clothes washing machines among other water saving devices in new homes.⁶

The DWP has stated that water requirements for any project that is consistent with the City's General Plan have been taken into account in the planned growth in water demand⁷ and that sufficient water supplies are available to accommodate the proposed project.⁸ The proposed homes within the Development Areas would be less dense than permitted under the current General Plan land use designations for the project site, and therefore would be consistent with the City's growth projections. Specifically, the project proposes 280 single-family homes on 851 net acres (i.e., 887 acres less 36 acres of road improvements), or approximately 0.33 dwelling units per net acre. Both the Sunland-Tujunga and the Sun Valley Community Plans permit 0 to 1 dwelling unit per acre under the Minimum Residential land use designation (see Section IV.G (Land Use) for additional information). However, the growth projections in both the Sunland-Tujunga and the Sun Valley Community Plans for a Minimum Residential land use designation are based on a midpoint of 0.5 dwelling units per net acre. The proposed project is within the City's growth projections because the proposed density is approximately 0.33 dwelling units per net acre, which is below the 0.5 dwelling units per net acre used to project growth in the Community Plans. Therefore, impacts to water supply would be less than significant.

⁶ *Ibid.*

⁷ *Correspondence with the Los Angeles Department of Water and Power, Charles C. Holloway, Supervisor Environmental Assessment, March 19, 2003.*

⁸ *Correspondence with the Los Angeles Department of Water and Power, David Christensen, Mechanical Engineering Associate, May 15, 2003.*

MITIGATION MEASURES

Although the proposed project would not have a significant impact on water supply the following mitigation measures are recommended to reduce further the proposed project's impacts:

- L.1-1** The project developer shall ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets.
- L.1-2** The project developer shall install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property.
- L.1-3** The project developer shall select and use drought-tolerant, low-water consuming plant varieties to reduce irrigation water consumption.
- L.1-4** The project developer shall install ultra-low flush water toilets and water-saving showerheads in new construction. Low-flow faucet aerators should be installed on all sink faucets.

CUMULATIVE IMPACTS

Implementation of the proposed project in conjunction with the 13 related projects identified in Figure II-1 in Section II.C (Related Projects) would further increase the demand for water service. As shown in Table IV.L-2, the total water consumption associated with the related projects (631,680 gpd) in combination with the proposed project (110,880 gpd) would be approximately 742,560 gpd. However, one related project (i.e., Related Project No. 9) is located in the unincorporated community of La Crescenta. The Los Angeles County Department of Public Works provides water services to La Crescenta, so the development of Related Project No. 9 would not contribute to the cumulative demand on the DWP for water service. Furthermore, Related Project No. 9 is located at such a distance from the project site that it would not, in combination with the proposed project, result in any cumulative impacts with respect to water facilities. As a result, the total water consumption associated with the related projects that must be satisfied by DWP water supplies is 581,180 gpd. In combination with the proposed project, the total cumulative water demand on DWP supplies is 692,060 gpd.

The golf course project (Related Project No. 11) is the largest contributor to the cumulative water demand (i.e., 545,473 gpd), representing approximately 80 percent of the total cumulative demand on the DWP for water service. The EIR⁹ and Addendum¹⁰ that was prepared for Related Project No. 11 concluded that the increase in water demand that would result from implementation of that project would constitute a significant impact related to water consumption.¹¹ Subsequently, the DWP determined that it has sufficient water supplies to serve Related Project No. 11 and has issued a “will-serve” letter.¹² Furthermore, the construction of the water line extensions to the water main in Foothill Boulevard that were needed to serve Related Project No. 11 have been completed and it is expected that this project will become operational in January 2004.

There will be sufficient water supplies available to accommodate the proposed project and the related projects served by the DWP because (1) Related Project No. 11, in combination with the proposed project (545,473 + 110,880 = 656,353), represents approximately 95 percent of the total projected cumulative demand on the DWP for water service (656,353 ÷ 692,060), (2) DWP has sufficient water supplies to serve Related Project No. 11, (3) DWP has indicated that it will have sufficient water supplies to serve the proposed project, (4) the 11 other related projects in the City represent only approximately five percent of the related projects’ cumulative demand on the DWP for water service, and (5) these 11 other related projects are or will be consistent with the City’s General Plan and therefore have already been taken into account in the planned growth in water demand.

With respect to water facilities, the development of the related projects may require the expansion of existing water facilities in their vicinity. Related Project No. 11 (i.e., the golf course) involves the largest water facility expansion of any of the related projects and, thus, would have the greatest potential to, in combination with the proposed project, result in a cumulative impact with respect to water facilities. However, as discussed above, the construction of the water facilities associated with Related Project No. 11 has been completed. Therefore, Related Project No. 11 would not combine with the proposed project to create cumulative impacts with respect to construction of new water facilities or expansion of existing facilities.

⁹ City of Los Angeles, *Draft Environmental Impact Report Los Angeles Golf Club*, EIR No. 95-02-86(CUC)(CUB)(VAC), State Clearinghouse No. 95051004, 1996.

¹⁰ City of Los Angeles, *Addendum to the Environmental Impact Report Los Angeles Golf Club*, EIR No. 95-02-86(CUC)(CUB)(VAC), State Clearinghouse No. 95051004, 1997.

¹¹ It should be noted that the threshold of significance used in the Los Angeles Golf Club EIR to determine the impacts on water utilities differs from the threshold of significance in Appendix G to the CEQA Guidelines that is used in this Draft EIR, in that the current CEQA Guidelines focus on the availability of water supplies while the threshold used in the Los Angeles Golf Club EIR focused on water consumption.

¹² City of Los Angeles, Department of Water and Power, written correspondence from Hugo A. Torres, Manager-Business Arrangements, Water Distribution Engineering, March 10, 2003.

Only one related project located in close proximity to the project site, the Duke Project (i.e., Related Project No. 7), would have the potential to combine with the proposed project to create cumulative impacts with respect to the construction and expansion of water facilities. The Duke Project EIR (EIR No. 89-1163-SUB(ZC/GPA)) indicated that the only water facilities that would be needed to serve this project would be the extension of the existing 16-inch water main in Estepa Drive. In addition, the Duke Project EIR analyzed the impacts on water facilities for the development of 41 single-family homes, but the City ultimately approved only 10 single-family homes. Therefore, the Duke Project may require more limited extension of water facilities than described in the Duke Project EIR. All the other related projects (with the exception of Related Project No. 11, as discussed above) would require only minor water infrastructure improvements which would result in temporary construction-related impacts. The relatively minor water facilities extension associated with the Duke Project in combination with the other related projects and the proposed project would not be expected to rise to a level of significance. Therefore, cumulative impacts on water facilities would be less than significant.

Table IV.L-2
Cumulative Water Consumption
Canyon Hills Project

Land Use ^a	Size	Generation Rate (gallons/1,000 sf/day) ^c	Total Water Consumption (gallons/day)
Fast Food Restaurant	3,050 sf	360	1,098
Convenience Store/Gas Station	7,427 sf	96	713
Retail	103,240 sf	96	9,911
Church	68,000 sf	240	16,320
Auto Repair	31,080 sf	96	2,984
Single-Family Homes	135 DU	396/DU	54,460
YMCA Expansion	7,508 sf	96	721
Golf Course	160 acres 13,000 sf clubhouse/ maintenance	b	545,473 ^{d,e}
<i>Total Related Projects</i>			<i>631,680</i>
Total Proposed Project			110,880
Cumulative Total			742,560
^a	<i>The 13 related projects are summarized into eight land uses.</i>		
^b	<i>Water generation rates vary based on irrigation demand during winter versus summer months in addition to generation rates for the clubhouse and maintenance building.</i>		
^b	<i>Source: City of Los Angeles Bureau of Engineering.</i>		
^d	<i>Source: City of Los Angeles, Draft Environmental Impact Report Los Angeles Golf Club, EIR No. 95-02-86(CUC)(CUB)(VAC), State Clearinghouse No. 95051004, 1996.</i>		
^e	<i>Source: City of Los Angeles, Addendum to the Environmental Impact Report Los Angeles Golf Club, EIR No. 95-02-86(CUC)(CUB)(VAC), State Clearinghouse No. 95051004, 1997.</i>		

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The proposed project's impacts on water supply would be less than significant without mitigation. However, the implementation of the recommended mitigation measures would further reduce the proposed project's impacts.