

4.4 UTILITIES

WATER RESOURCES

EXISTING CONDITIONS

The City of Los Angeles (City) obtains its water supply primarily from three sources, namely, the local groundwater basins, the Los Angeles Aqueducts (LAA) and purchases from the Metropolitan Water District of Southern California (MWD). Additional water supply comes from recycling wastewater for reuse. Approximately 85 percent of the City's current water supply comes from imported sources. These sources are snowmelt and groundwater from the eastern Sierra Nevada, purchased water from the Northern California, through the State Water Project, and the Colorado River through the Colorado River Aqueduct. The remainder of the City's water supply comes from local wells and recycled water. For the fiscal year 1995-1996, the LAA delivered 463,300 acre-feet (AF), while the local groundwater basins supplied 77,300 AF. Supplemental purchases from MWD accounted for 66,200 AF. Additionally, 2,000 AF of recycled water was delivered during this fiscal year. **Figure 4.4-1** illustrates the contribution of these sources to the City's water supply for fiscal year 1995-1996.

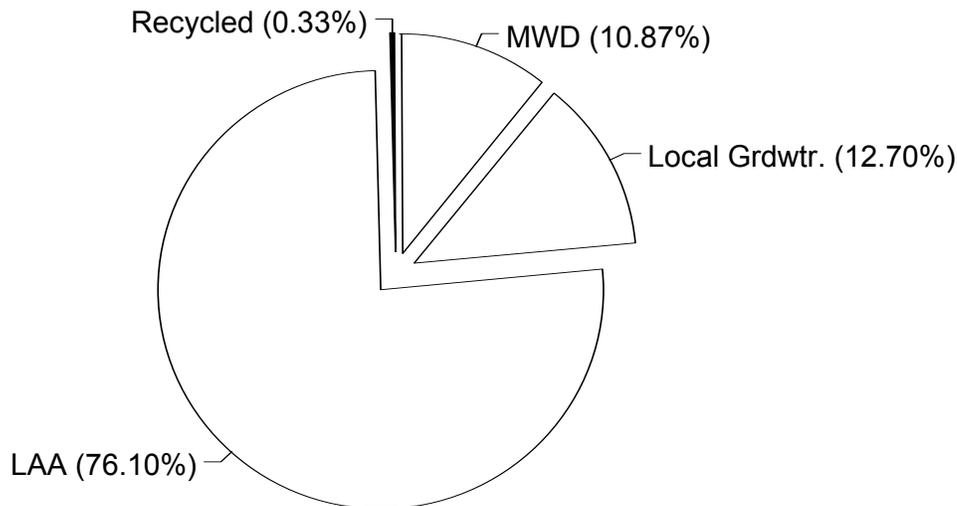


Figure 4.4-1 Water Sources for Fiscal Year 1995-1996

Local Groundwater. The City owns water rights in four separate groundwater basins: the San Fernando Basin, the Sylmar Basin, the Central Basin and the West Coast Basin. Groundwater activities for the San Fernando and Sylmar Basins are managed by the Upper Los Angeles River Area (ULARA) Watermaster. The Central and West Coast Basins are outside the ULARA boundaries and lies within the jurisdiction of the State Department of Water Resources. **Figure 4.4-2** shows the City’s annual groundwater entitlements. Approximately 80 percent of the City’s groundwater supply is extracted from the San Fernando Basin. The Central Basin, and the Sylmar Basin provide 15 percent and 5 percent, respectively. The West Coast Basin water right is not used to supply the Los Angeles service area, due to the quality of its water. Groundwater provides the City with a reliable, steady source of water supply. Since 1990, the City has extracted an average of 92,400 AFY, or 15 percent of the total City supply, from its groundwater basins.

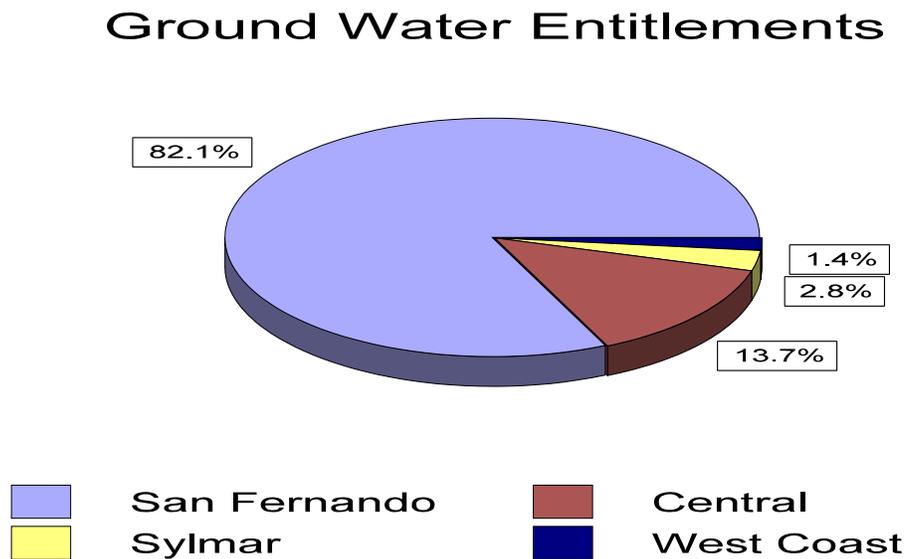


Figure 4.4-2 Ground Water Entitlements

Los Angeles Aqueducts. The City completed the First Los Angeles Aqueduct in 1913 to import water from the eastern slope of the Sierra Nevada, some 250 miles to the north. To supplement the original aqueduct, the Second Los Angeles Aqueduct was built and completed in 1970, increasing

the capacity of the system by 50 percent. Between 1970 and 1986, water deliveries through the LAA accounted for more than 75 percent of the City's water supply. Deliveries in recent years through the LAA, however, have been significantly less because of the extended drought and the legal curtailment of water diversions from the Mono Basin. In 1994, the City's water rights in the Mono Basin were modified with new requirements. Future diversions were severely limited to protect and enhance the Mono Basin ecosystem. Over the next 20 years, City exports from the Mono Basin are expected to be maintained at the current level of 16,000 AFY, as most of the basin's runoff is used to raise the level of Mono Lake. Future water-based measures to mitigate air quality problems in Owens Lake may demand as much as 42,000 AFY from the LAA. The Lower Owens River Project will also divert flow from the LAA to rewater a 60-mile stretch of the Owens River. The projected average export from the LAA to the year 2025 is estimated to be 321,000 AFY, or 40 percent of the City's average year water supply. During dry years, deliveries from the LAA will only provide approximately 20 percent of the City's total water needs by 2025.

Metropolitan Water District. The City supplements its local and imported supplies by purchasing water from the MWD. The amount purchased from the MWD varies from year to year, depending upon demand in the City and the quantity of water available from the City's own sources. Between the fiscal years 1970 and 1994, water delivered by the MWD to the City averaged 130,000 AFY. However, because of the drought from 1987 to 1992 and court injunctions halting the City's Mono Basin diversions, water purchases from the MWD have increased significantly in recent years. The City's water purchases from the MWD is expected to increase to approximately 300,000 AFY or 38 percent of the City's normal water needs by 2025.. During dry periods, water from the MWD may comprise more than 60 percent of the City's total water supply.

Recycled Water: In 1990, the City adopted a goal for reuse of 250,000 AF per year, or 40% of the City's wastewater by 2010. For its part, LADWP set a goal to replace ten percent of the City's potable water use with the use of recycled water by 2010. The goal for year 2000 is to utilize an estimated 32,000 AF . By 2025, recycling will displace approximately 74,000 AFY of water that would have otherwise been used for potable purposes. Of the total amount, 42,000 AF will be used to enhance the City's groundwater supply reliability and approximately 32,000 AF will be used for irrigation, industrial, and seawater intrusion barrier purposes.

LADWP's recycled water programs expected to produce over 102,000 AF per year by 2025. At present, production of recycled water totals 41,550 AF per year. The treated water is currently being used for irrigation, industrial, and recreational purposed. Additional use of the City's recycled water through releases to the Los Angeles River and sales to the West Basin Municipal Water District (West Basin) as present total 80,200 AF per year. By 2025, recycled water releases to the Los Angeles River and sales to West Basin are expected to total 147,530 AF per year. Total recycled water use from the City supply is expected to be approximately 250,000 AF by 2025.

The Westside Water Recycling Project was initiated in 1996. The City purchases recycled water from the West Basin Water Reclamation Plant, which is located in El Segundo and provides tertiary

treatment to the secondary-level water received from the Hyperion Plant since 1995, and supplies the Westchester-Playa del Rey community. Up to 350 AFY is being delivered today, but demand is expected to increase to nearly 3,000 AFY with the development of Westchester-Playa del Rey CPA, Playa Vista, and other nearby customers.

Water Consumption. Information provided by the 2000 Urban Water Management Plan prepared by the Department of Water and Power (DWP) indicates that the City’s annual water consumption at present is approximately 660,000 AF. The 2000 Water Plan Projected Demands indicate 639,000 AF for 2000, 679,000 AF for 2005, 718,000 AF for 2010, 756,000 AF for 2015, and 800,000 AF for 2025. Of the water consumed during the 2000 fiscal year, approximately two-thirds was used by residential customers, approximately one-fourth was consumed by the commercial and governmental sectors, and four percent of the water supply was served to the industrial sector. The balance or unaccounted for water was used for either firefighting or lost through evaporation, system leaks or breaks. **Table 4.4-1** provides a breakdown of the water consumption in acre-feet among the consuming sectors for year 2000.

Table 4.4-1 City’s Water Use by Sector AF per year x 1,000 For 2000		
Water Use Groups	AF per year x 1000 for 2000	Percent of Total Water Use
Single-family Residential	226	35.4%
Multi-family	196	30.6%
Commercial and Governmental	156	24.4%
Industrial	24	3.8%
Unaccounted for Water	37	5.8%
Total Water Use	639	100.0%
<i>Source: Urban Water management Plan for the City of Los Angeles, 2000</i>		

IMPACT ASSESSMENT

Threshold of Significance. A significant adverse impact to the City’s water resources will occur if the implementation of the proposed plan would result in a disproportionate share by the community plan area in the City's water supply.

Assessment. The issue of water demand and supply is a citywide concern and it transcends the boundaries of individual community plan areas that comprise the entire City. The impact of the proposed plan on the City's future water supply is best assessed quantitatively through a demand density basis. The Westchester-Playa del Rey community plan area has a total land area of 8.62 square miles. Of this area, approximately 5.97 square miles are developed (excluding open space, vacant land, infrastructure and streets). On the other hand, the City of Los Angeles has a total land area of 472.81 square miles, of which 260.14 square miles are developed. If the water demand in the community plan area during the planning period exceeded the citywide demand on a per developed square mile basis, the implementation of the proposed plan will require a disproportionate share by the community plan area in the City's future water supply during the planning period. This is a significant adverse impact.

Table 4.4-2 Existing (2000) and 2025 Daily Water Consumption in the Westchester-Playa del Rey Community Plan Area (in Gallons)			
Land Use	Existing	2025	Increase
Residential	4,500,400	9,390,000	4,889,600
Office	1,263,744	1,503,744	240,000
Retail	511,608	595,608	84,000
Industrial	490,349	583,347	92,998
T O T A L	6,766,101	10,719,699	3,953,598
Demand/DSM*	1,133,350	1,795,594	662,244
* Demand Per Square Mile. Consumption Rate: 200gallons/unit/day for residential; 240gallons/1,000sf/day for offices; 120gallons/1,000sf/day for retail; 30gallons/1,000/sf/day for industrial. Source: City of Los Angeles Wastewater Program Management, Sewer Facilities Guide and Generation Rates, August 1988.			

Table 4.4-2 indicates that the existing (2000) daily water consumption for all land uses in the Westchester-Playa del Rey community plan area reached 1,133,350 gallons per developed square mile. This current daily water consumption does not exceed the projected 2025 citywide daily water consumption of approximately 1,484,955 gallons per developed square mile, and falls below the 2025 daily water consumption by 351,605 gallons per developed square mile. Under the proposed plan, daily water consumption in the community plan area by 2025 is projected to reach approximately 1,795,594 gallons per developed square mile, an increase of 662,244 gallons per

developed square mile. This projected daily water consumption in the community plan area would exceed the projected 2025 citywide daily water consumption by approximately 310,639 gallons per developed square mile. The implementation of the proposed plan would thus cause the community plan area to require a greater share of the entire City's future water supply. This is a significant adverse impact.

Information provided by the DWP indicates that existing major water supply facilities in the community plan area are adequately sized for the anticipated growth and existing facilities are sufficient to serve most areas in the community plan area, although new facilities may be needed to supply some small areas not yet presently served and the projected increase in water consumption may require the upgrading or expansion of existing local distribution systems within the community plan area. Furthermore, water consumption habits of the residents of the City have changed as a result of the recent drought and the increased emphasis on the efficiency of water use. Changed water consumption habits and the implementation of permanent conservation measures, e.g., installation of ultra-low flush toilets, have contributed to a reduction of water consumption by 15 percent over the last five years.

MITIGATION POLICIES

1. Continue to implement existing water conservation measures, including ultra low-flush installation, school educational, public information, and residential programs, and develop new ones as needed.
2. Incorporate water conservation practices in the design of new projects so as not to impede the City's ability to supply water to its other users or overdraft its groundwater basins.
3. Develop reliable and cost-effective sources or alternative water supplies, including water reclamation and exchanges and transfers.
4. Protect existing water supplies from contamination, and clean up groundwater supplies so those resources can be more fully utilized.
5. Expand, upgrade or improve the local water distribution system within the community plan area whenever necessary to accommodate increased demand for water.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

None. Implementation of the proposed mitigation policies will reduce the significant impacts of the proposed plan to a level of insignificance.

ENERGY RESOURCES.

EXISTING CONDITIONS

Electricity. The DWP provides electricity service to approximately 1.3 million customers in the City. The DWP obtains power from four municipally owned power plants within the Los Angeles Basin, namely, its hydro-generators on the Los Angeles Aqueduct, shared-ownership generating facilities in Arizona, Nevada and Utah, and purchases from Southwest and Pacific Northwest.

Basin Thermal Generation. There are four gas- and oil-fired steam generating plants on the DWP's system, namely, the Haynes Generating Station near Seal Beach, Scattergood Generating Station near Playa del Rey, Valley Generating Station in the San Fernando Valley, and Harbor Generating Station at the Los Angeles Harbor. These generating plants provide a total capability of 2,772 megawatts.

Coal-Fueled Thermal Generation. The DWP's coal generation capability totals 1,797 megawatts, coming from Mohave, Navajo and Intermountain Generating Station (IGS). The DWP owns a 477-megawatt share of the three-unit Navajo plant, which is located near Page, Arizona and a 316-megawatt share of the two-unit Mohave plant, which is located in southern Nevada. The IGS, which is located near Delta, Utah, is the largest coal plant with a DWP-contracted capacity of 714 megawatts and additional 290 megawatts resulting from an Excess Power Sales Agreement with the Inter mountain Consumer's Power Association.

Nuclear-Fueled Thermal Generation. The DWP's interest in the Palo Verde Nuclear Generating Station, which is located west of Phoenix, Arizona, is 368 megawatts, of which 217 megawatts is through direct ownership and 151 megawatts is through South California Public Power Authority participation.

Hydroelectric Generation. The DWP has a total hydroelectric capability of 1,447 megawatts. The sources of hydroelectric capability include the seven-unit Castaic Pumped Storage Plant, which provides a resource of 1,247 megawatts of peaking capacity, hydroelectric plants in the Owens Gorge and along the Owens Valley, which provide a total of 199 megawatts in capacity, and small in-basin hydro-electric generators which provide a total of approximately one megawatt.

Purchases. The DWP purchases electricity as follows: (1) a 74-megawatt purchase of capacity and energy from Deseret which is assumed to increase to 200 megawatts when the Utah-Nevada Transmission Line would be available; (2) an existing 105-megawatt purchase from the Montana Power Company expires in 2010; (3) a 64-megawatt purchase from the Utah Power and Light is contingent upon the availability of IGS; and (4) a 491-megawatt supply from the Hoover Power Plant which will expire in 2017 and which may be curtailed to improve the habitat of several endangered species.

Cogeneration. Cogeneration is the electricity produced by industrial and commercial customers and is generated from natural gas or by using the by-products of production processes. This electricity

is used for their own consumption with any excess being sold back to the market. The DWP's largest cogenerators are a 60-megawatt unit owned and operated by Texaco and 40-megawatt unit under the University of California in Los Angeles.

Distribution. Electricity is distributed through an extensive distribution network. The DWP operates 19 receiving stations and 156 distribution stations. Electricity is distributed to customers through a network of overhead and underground power lines entailing 289,000 poles and 2,200 miles of underground cable.

Natural Gas. The Southern California Gas Company (The Gas Company), the largest distributor of natural gas in the nation, supplies natural gas to the City of Los Angeles. It obtains its gas supplies from a variety of sources, including Trans Western, El Paso and Federal Offshore. In 1990, the Gas Company provided about 123 billion cubic feet of natural gas to its customers in the City. About 39 percent was consumed by residential customers, 29 percent was consumed by commercial and industrial customers, 22 percent was used for electric generation, and about 10 percent was wholesaled to other utilities. Average residential consumption in the Gas Company service area is about 65,000 cubic feet per year.

Natural gas is distributed through an extensive network of underground gas mains. Natural gas is distributed throughout the City by means of a series of high-pressure gas mains (greater than 60 pounds per square inch), regulator stations, and standard pressure service lines (between one and 60 pounds per square inch). Numerous smaller lines (less than six inches) comprise the local neighborhood distribution systems. The Gas Company has about 41,500 miles of gas mains in its service area.

IMPACT ASSESSMENT

Threshold of Significance. A significant adverse impact to the City's energy resources will occur if the implementation of the proposed plan would result in a disproportionate share by the community plan area in the City's projected energy supply.

Assessment. The issue of energy demand and supply is a citywide concern and it transcends the boundaries of individual community plan areas that comprise the entire City. The impact of the proposed plan on the City's future energy resources is best assessed quantitatively through a demand density basis. If the energy demand in the community plan area during the planning period exceeded the citywide demand on a per developed square mile, the implementation of the proposed plan will require a disproportionate share by the community plan area in the City's future energy resources. This is a significant adverse impact.

Table 4.4-3 Existing (2000) and 2025 Annual Electricity Consumption in the Westchester-Playa del Rey Community Plan Area (in Kilowatt-hours)			
Land Use	Existing	2025	Increase
Residential	116,380,344	242,825,400	126,445,056
Office	90,041,760	107,141,760	17,100,000
Retail	65,230,020	75,940,020	10,710,000
Industrial	86,628,447	103,057,970	16,429,523
T O T A L	358,280,571	528,965,150	170,684,579
Demand/DSM*	60,013,496	88,603,877	28,590,381
*Demand Per Developed Square Mile. Consumption Rates: 5,172kwh/unit/yr for residential; 17.1kwh/sf/yr for office; 15.3kwh/sf/yr for retail; & 5.3kwh/sf/yr for industrial. Source: AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District			

Table 4.4-3 shows the existing (2000) and projected 2025 annual electricity consumption for all land uses in the community plan area on a per developed square mile basis. The table indicates that the existing annual electricity consumption in the community plan area reached 60,013,496 kilowatt-hours per developed square mile. This annual electricity consumption exceeds the projected 2025 citywide annual electricity of approximately 59,919,894 kilowatt-hours, by 93,602 kilowatt-hours per developed square mile, currently. With the implementation of the proposed plan, the annual electricity consumption in the community plan area by 2025 is estimated to reach approximately 88,603,877 kilowatt-hours per developed square mile, an increase of 28,590,381 kilowatt-hours per developed square mile. This projected annual electricity consumption would exceed the projected 2025 citywide electricity consumption by approximately 28,683,983 kilowatt-hours. The implementation of the proposed plan would thus require an even greater disproportionate share by the community plan area in the entire City's future electricity supply during the planning period. This is a significant adverse impact.

The DWP has indicated that existing electrical distribution facilities in the community plan area are capable of meeting present demands. However, the cumulative effect of the increased electrical service demands from additional development and increasing population would require the installation of additional electrical distribution facilities. At present, though, there are no plans to upgrade or construct new distribution facilities in the community plan area in the next few years.

Table 4.4-4 Existing (2000) and 2025 Monthly Natural Gas Consumption in the Westchester-Playa del Rey Community Plan Area (in Cubic Feet)			
Land Use	Existing	2025	Increase
Residential	88,162,836	183,950,100	95,787,264
Office	10,531,200	12,531,200	2,000,000
Retail	12,363,860	14,393,860	2,030,000
Industrial	53,938,467	64,168,170	10,229,703
T O T A L	164,996,363	275,043,330	110,046,967
Demand/DSM*	27,637,582	46,070,909	18,433,327
*Demand Per Square Mile. Consumption Rates: 3,918cf/unit/mo for residential; 2.0cf/sf/mo for office; 2.9cf/sf/mo for retail; & 3.3 cf/sf/mo for industrial. Source: AQMD Handbook for Preparing EIRs, rev. April 1993, South Coast Air Quality Management District.			

Table 4.4-4 presents the existing monthly natural gas consumption for all land uses in the community plan area. The table indicates that the existing monthly consumption of natural gas for all land uses amounted to 27,637,582 cubic feet (cu. ft.) per developed square mile. This monthly natural gas consumption by the residents of the community plan area does not exceed, by 3,289,601 cu. ft. per developed square mile, the 2025 projected citywide natural gas consumption of approximately 30,927,183 cu. ft. per developed square mile. Under the proposed plan, monthly consumption of natural gas in the community plan area by 2025 is estimated to reach approximately 46,070,909 cu. ft. per developed square mile, an increase of 18,433,327 cu. ft. per developed square mile. This projected monthly natural gas consumption by the community plan area would exceed the projected 2025 citywide consumption by approximately 15,143,726 cu. ft. per developed square mile. The implementation of the proposed plan would thus require an even greater disproportionate share by the community plan area in the entire City's future natural gas supply during the planning period. This is a significant adverse impact.

MITIGATION POLICIES

1. Promote energy conservation and efficiency to the maximum extent that are cost effective and practical.
2. Encourage and provide incentives for the development and use of alternative sources of

energy.

3. Adopt and implement a program to provide technical assistance and incentives to property owners and developers on building design and/or the use of energy-efficient systems in new residential, commercial and industrial developments to exceed existing State of California Energy Code standards.
4. Promote the responsible use of natural resources in consonance with City environmental policies.
5. Expand, upgrade or improve local distribution lines within the community plan area whenever necessary to accommodate increased demand for energy.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

None. Implementation of the proposed mitigation policies will reduce the significant impacts of the proposed plan to a level of insignificance.

WASTEWATER SYSTEM

EXISTING CONDITIONS

The Collection System. The first public sewer was purchased in 1869. In 1894, the first major interceptor, the Dockweiler Sewer, was constructed. In 1907, the oldest active sewer, the Central Outfall Sewer, was placed in service. In the late 1920s, the North Outfall Sewer was extended to serve the San Fernando Valley. By the 1940s, nearly half of the present system was constructed.

The City owns and operates an extensive wastewater treatment system with a current total capacity of 550 million gallons per day (MGD) that provides for the collection, treatment and disposal of wastewater for the majority of the City's incorporated areas and for an additional 27 contracting communities and public agencies. Two independent components comprise the City's wastewater treatment system: the Hyperion System and the Terminal Island System. Sewage treatment for the community plan area is provided by the Hyperion System, which handles about 96 percent of the total wastewater flow generated by the City and its contract agencies. The service area of the Hyperion System covers approximately 514 square miles, which includes 83 square miles of contractual area outside the City.

The Hyperion System's physical structure includes more than 6,500 miles of mainline sewers, a wastewater treatment plant, two water reclamation plants, 48 pumping stations and other various support facilities. Approximately 20 miles of sewers are over 100 years old, while 50 percent are 50 years and older.

Hyperion Treatment Plant (HTP). The largest of these treatment plants is the Hyperion Treatment Plant with a current capacity of 450 MGD and is located on a 144-acre site adjacent to the Santa Monica Bay and southwest of the Los Angeles World Airports. The HTP serves the greater Los Angeles metropolitan area. Prior to November 1987, sludge generated by the City of Los Angeles was pumped from the HTP into a seven-mile outfall and discharged into a submarine canyon in the Santa Monica Bay at a depth of 320 feet. The seven-mile outfall was permanently taken out of service in November 1987 and the City stopped dumping sludge into the ocean pursuant to a consent decree. Sludge is currently treated and used as landfill cover and, in land application, as fertilizer.

The HTP receives sewage from five major interceptor sewer systems:

- Central Outfall Sewer (COS), which serves the southern and central parts of the City, El Segundo and portions of Culver City.
- North Central Outfall Sewer-North Outfall Sewer Interceptor System (NCOS-NOS), which serves the southern portions of the cities of Burbank and Glendale, eastern portions of the San Fernando Valley, sections of eastern, central and south-central Los Angeles, and portions of Culver City.
- North Outfall Sewer-La Cienega-San Fernando Valley Relief Sewer Interceptor System (NOS-LCSFVRS), which serves the central, northeastern and western areas of the San Fernando Valley, the western portion of the City, including Beverly Hills and Hollywood, and Playa del Rey.
- Coastal Interceptor Sewer System (CIS), which serves the coastal areas of the City (Pacific Palisades, Venice and Mar Vista), the City of Santa Monica and adjacent areas of Los Angeles County.
- North Outfall Replacement Sewer (NORS), designed to keep the pressure off of the North Outfall Sewer.

Los Angeles-Glendale Water Reclamation Plant (LAGWRP). The Los Angeles-Glendale Water Reclamation Plant began continuous operation in May 1976. The facility, which has a current capacity to treat 20 MGD, serves the Glendale-Burbank-La Cresenta area. Excess flows from the San Fernando Valley are also treated at the plant. The plant is normally operated on a constant-flow basis, providing full secondary treatment utilizing the standard rate activated sludge process. The advanced secondary treated effluent from the plant is either reclaimed by the cities of Los Angeles and Glendale and/or discharged into the Los Angeles River. The waste sludge is conveyed to the HTP through the NCOS-NOS.

Tillman Water Reclamation Plant (TWRP). The Tillman Water Reclamation Plant is located in the Sepulveda Flood Control Basin and has a current capacity of 80 MGD. The facility was built to

handle wastewater flows from the communities in the San Fernando Valley. The plant produces an effluent of an even higher quality than HTP's by providing secondary treatment followed by coagulation, filtration and disinfection. The plant's effluent is planned to be used in an extensive distribution network which conveys reclaimed water to a large number of users in the San Fernando Valley. Reclaimed water not reused is sent to the Los Angeles River. All waste sludge is returned to the Additional Valley Outfall Relief Sewer (AVORS) for conveyance to the HTP.

IMPACT ASSESSMENT

Threshold of Significance. A significant adverse impact will occur if the implementation of the proposed plan would result in a disproportionate contribution by the community plan area to the City's projected level of wastewater generation.

Assessment. The issue of wastewater flow is a citywide concern and it transcends the boundaries of individual community plan areas that comprise the entire City. The impact of the proposed plan on the City's wastewater disposal system is best assessed quantitatively through a demand density basis. If the wastewater flow in the community plan area during the planning period exceeded the citywide flow per developed square mile, the implementation of the proposed plan will contribute a disproportionate share to the City's future wastewater flow. This is a significant adverse impact.

Table 4.4-5 shows the existing (2000) and projected 2025 wastewater flows for all land uses in the community plan area on a per developed square mile basis. The table indicates that the existing daily wastewater flow generated by the community plan area is now approximately 303,326,667 gallons per developed square mile. This daily wastewater flow generated by the community plan area now exceeds the projected 2025 average citywide daily wastewater generation of approximately 1,432,256 gallons per developed square mile, by 301,894,411 gallons per developed square mile. Under the proposed plan, the daily wastewater flow to be generated by the community plan area by 2025 is estimated to reach approximately 359,756,784 gallons per developed square mile, an increase of 56,430,117 gallons per developed square mile. This projected wastewater generation by the residents of the community plan area would exceed the projected 2025 citywide wastewater generation by approximately 358,324,528 gallons per developed square mile. The implementation of the proposed plan would thus cause the community plan area to contribute an ever greater disproportionate share in the entire City's future wastewater generation during the planning period. This is a significant adverse impact.

Table 4.4-5 Existing (2000) and 2025 Wastewater Generated (Daily) in the Westchester-Playa del Rey Community Plan Area (in Gallons)			
Land Use	Existing	2025	Increase

Residential	4,500,400	9,390,000	4,889,600
Office	1,053,120,000	1,253,120,000	200,000,000
Retail	426,340,000	496,340,000	70,000,000
Industrial	326,899,800	388,898,000	61,998,200
T O T A L	1,810,860,200	2,147,748,000	336,887,800
G/D/DSM*	303,326,667	359,756,784	56,430,117
<p>*Generation /day/developed square mile. Demand Rates: 200gallons/unit/day for residential; 200gallons/1,000sf/day for office; 100gallons/1,000sf/day for retail; & 20gallons/1,000sf/day for industrial. Source: City of Los Angeles' Wastewater Management Program, Sewer Facilities Charge Guide and Generation Rates, August 1988.</p>			

MITIGATION POLICIES

1. Continue to implement existing water conservation measures, including ultra low-flush installation and, school educational, public information, and residential programs, and develop new ones as needed.
2. Adopt a comprehensive water reuse ordinance which will establish, among other things, goals on reuse of reclaimed water.
3. Establish water reuse demonstration and research programs and implement educational programs among consumers to increase the level of acceptance of reclaimed water.
4. Provide incentives for the development of new markets and uses for reclaimed water.
5. Rehabilitate existing sewers in poor structural condition and construct relief sewers to accommodate growth whenever necessary.
6. Expand or upgrade existing local sewers in the community plan area to accommodate increased wastewater flow whenever necessary.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

None. Implementation of the proposed mitigation policies will reduce the significant impacts of the proposed plan to a level of insignificance.

SOLID WASTE GENERATION AND DISPOSAL

EXISTING CONDITIONS

Solid waste collection in the City of Los Angeles is provided by the Department of Public Works' Bureau of Sanitation and a number of private hauling companies. The Bureau of Sanitation collects solid waste generated primarily by single-family dwellings, most small, multi-family dwellings usually consisting of four units or fewer, and public facilities, which together accounts for 41 percent of the City's total solid waste. Approximately 130 private hauling companies collect solid waste generated primarily from large multi-family residential, commercial and industrial properties, which account for 59 percent. Collection of residential solid waste in the Westchester-Playa del Rey CPA is being currently undertaken by the City of Los Angeles' Bureau of Sanitation while commercial and industrial wastes are collected by private haulers.

The City has experienced high population growth in recent years. This tremendous population growth has impacted severely the City's ability to provide services to residents within its borders, including the collection and disposal of solid waste. At present, due to daily permit limitations on the amount of waste that can be accepted at landfills in the region, the City does not have sufficient daily capacity to dispose all solid waste collected both publicly and privately within its borders. **Table 2-2** of the Draft Environmental Impact Report (DEIR) for the Chiquita Canyon Landfill Expansion/Closure and Resource Recovery Facilities estimated that, as of January 1, 1995, there remained a regional municipal solid waste landfill capacity of 100.9 million tons.

Table 4.4-6 of the above document also presented various landfill capacity shortfall scenarios for the entire Los Angeles County, which includes the City. One scenario projected that by the year 1998, the landfill capacity shortfall in the county would be 6,410 tons per day (tpd). The second scenario, which assumes that no new landfills being sited, no new expansions permitted, full implementation of waste diversion programs by year 2000, and that the Azusa and Puente Hills landfills remain in operation and the Sunshine Canyon landfill reopens, estimates a shortfall of 5,994 tpd for the county by 2003. The third scenario, which assumes that the Puente Hills, BKK, Sunshine Canyon and Azusa landfills (after 1995) are allowed to operate under permitted conditions, estimates a shortfall of 24,234 tpd by 2006. **Table 7-1** of the same document further estimates that this landfill capacity shortfall, under existing conditions, would increase to 17,994 tpd by 2003 (this estimate assumes that AB 939 diversion would be fully implemented by that time).

The management of non-hazardous waste in the City is guided by policies at the state and local levels. Acknowledging the need to develop a comprehensive integrated solid waste management policy throughout the state in the face of solid waste disposal and quickly decreasing landfill capacity, the state Legislature in 1989 enacted Assembly Bill (AB) 939, otherwise known as the California Integrated Waste Management Act. To address landfill capacity problems throughout the state, the California Integrated Waste Management Act and its modification, AB 2492, require that

all jurisdictions, cities, and counties divert 25 percent of the total wastestream from landfill disposal by January 1, 1995 and 50 percent by January 1, 2000. In addition, the City of Los Angeles has included a goal to reduce or recycle 70 percent of all City waste by 2025. AB 939 also requires that adequate long-term disposal capacity be identified and secured. In addition, state law requires that each city in the state prepare and adopt a Solid Waste Generation Study (SWGS) and a Source Reduction and Recycling Element (SRRE). The main purpose of the SRRE is to describe in detail how each city will meet the state-mandated diversion requirements. The SRRE for each locality then becomes the basis for each county's Integrated Solid Waste Management Plan.

For its part, the City of Los Angeles has developed its own Solid Waste Management Policy Plan (CiSWMPP), which is its long-range solid waste management policy, while the SRRE is the strategic action plan for diverting solid waste from landfills. The CiSWMPP established the following goals:

1. **Maximum Waste Diversion** - To create an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of waste requiring disposal.
2. **Adequate Recycling Facility Development** - To expand the siting of facilities that enhance waste reduction, recycling, and composting throughout the City beyond the current limits of the zoning code in ways that are economically, socially, and politically acceptable.
3. **Adequate Collection, Transfer, and Disposal of Mixed Solid Waste** - The City shall ensure that all mixed solid waste that cannot be reduced, recycled, or composted is collected, transferred, and disposed in a manner that minimizes adverse environmental impacts.
4. **An Environmentally Sound System** - To develop an environmentally sound solid waste management system that protects public health and safety, protects natural resources and minimizes adverse environmental impacts.
5. **A Cost-Effective Solid Waste Management System** - The City shall operate a cost-effective integrated waste management system that emphasizes source reduction, recycling, reuse, and market development and is adequately financed to meet operational and maintenance needs.

Information contained in two publications from the Solid Resources Citywide Recycling Division of the Department of Public Works' Bureau of Sanitation indicates that, in 1995, the entire City generated a total of 6.3 million tons of solid waste. Of this total, the City disposed into landfills 3.5 million tons and diverted 2.8 million tons. These figures show a solid waste diversion rate of approximately 44.5 percent for the City for that year, which exceeds and is almost double the diversion rate of 25 percent required under AB 939 and surpassing even the City's 1990 projected

goal of 36 percent. The same source noted that approximately 70.9 percent of citywide diversion was due to recycling and source reduction programs, mostly coming from commercial/industrial businesses and additional recycling by City residents.

IMPACT ASSESSMENT

This section establishes the threshold of significance by which impacts generated by, or attributable to, the proposed project would be gauged. Based on this threshold of significance, it then proceeds to analyze which of these identified impacts would have significant adverse effect on the environment.

Threshold of Significance. A significant adverse impact will occur if the implementation of the proposed plan would result in a disproportionate contribution by the community plan area to City’s projected solid waste generation.

Assessment. The issues of solid waste generation and disposal are a citywide concern and they transcend the boundaries of individual community plan areas that comprise the entire City. The impact of the implementation of the proposed plan on the City's future solid waste generation and disposal system is best assessed quantitatively through a demand density basis. If the level of solid waste generation in the community plan area during the same period exceeded the citywide solid waste generation per developed square mile, the implementation of the proposed plan will cause the community plan area to contribute a disproportionate share to the City's future solid waste generation and will cause a significant adverse impact.

Table 4.4-6 Existing (2000) and 2025 Solid Waste Generated (Daily) in the Westchester-Playa del Rey Community Plan Area (in Pounds)			
Land Use	Existing	2025	Increase
Residential	90,008	187,800	97,792
Office	31,593,600	37,593,600	6,000,000
Retail	21,317,000	24,817,000	3,500,000
Industrial	16,344,990	19,444,900	3,099,910
T O T A L	69,345,598	82,043,300	12,697,702
Demand/DSM*	11,615,678	13,742,596	2,126,918

*Demand/Developed Square Mile.
Generation Rates: 4lbs/unit/day for residential; 6lbs/1,000sf/day for office;
5lbs/1,000sf/day for retail; and 11lbs/1,000sf/day for industrial.
Source: City of Los Angeles' EIR Manual for Private Projects.

Table 4.4-6 indicates that the existing (2000) daily solid waste generation for all land uses in the community plan area is approximately 11,615,678 pounds (lbs.) per developed square mile. This level of solid waste generation now exceeds, by 11,582,795 lbs. per developed square mile, the projected 2025 citywide daily solid waste generation of approximately 32,883 lbs. per developed square mile. Under the proposed plan, the projected daily solid waste generation in the community plan area by 2025 is estimated to reach approximately 13,742,596 lbs. per developed square mile, or an increase of 2,126,918 lbs. per developed square mile. This projected solid waste generation by the residents of the community plan area would exceed the projected 2025 daily citywide solid waste generation by approximately 13,709,713 lbs. per developed square mile. The implementation of the proposed plan would thus cause the community plan area to contribute an even greater disproportionate share in the entire City's future solid waste generation during the planning period. This is a significant adverse impact.

MITIGATION POLICIES

1. Implement an integrated solid waste management system that maximizes source reduction and materials recovery and minimizes the amount of solid waste requiring disposal.
2. Encourage and provide incentives for the processing and marketing of recyclable items.
3. Accelerate on-going efforts to provide alternative solid waste treatment processes and the expansion of existing landfills and establishment of new sites.

UNAVOIDABLE SIGNIFICANT ADVERSE IMPACTS

None. Implementation of the proposed mitigation policies will reduce the significant impacts of the proposed plan to a level of insignificance.