
4.25 Public Utilities (CEQA)

4.25.1 Water Use (CEQA)

4.25.1.1 Introduction

The water use analysis addresses water supply and use of recycled water, as more fully described in Section 4.25.1, *Water Use* (subsection 4.25.1.1), of the Draft EIS/EIR. Technical Report 15a, *Water Use Technical Report*, of the Draft EIS/EIR, and Technical Report S-10a, *Supplemental Water Use Technical Report*, of this Supplement to the Draft EIS/EIR contain calculations of projected water use.

4.25.1.2 General Approach and Methodology

The analysis of water use presented below is based on the general approach and methodology described in Section 4.25.1, *Water Use* (subsection 4.25.1.2), of the Draft EIS/EIR. In addition, the analysis completed for this Supplement to the Draft EIS/EIR includes consideration of changes to baseline conditions (see Section 4.25.1.3 below), using the same methodology applied to the 1996 baseline analysis.

4.25.1.3 Affected Environment/Environmental Baseline

The affected environment/environmental baseline related to water use used in this Supplement to the Draft EIS/EIR is the same as described in Section 4.25.1, *Water Use* (subsection 4.25.1.3), of the Draft EIS/EIR with the exceptions identified below. These exceptions include changes in legislation pertaining to water availability assessments and modification of some of the baseline water use numbers to reflect changes in square footage of facilities and to correct errors (refer to **Table S4.25.1-1**, Potable Water Use Comparison, in Section 4.25.1.6 below). A discussion of Year 2000 conditions is also provided below; where appropriate information current to 2002 is provided. This information does not alter the conclusions of the Draft EIS/EIR.

- ◆ Los Angeles Department of Water and Power (LADWP) is a member agency of the Metropolitan Water District (MWD) and purchases import water (State Water Project Water and Colorado River Water) from MWD. In addition, LADWP has some ground water resources. MWD's plan to serve is documented in the Integrated Resource Plan (IRP), which discusses the regional supply and demand options and capacities. LADWP documents local water supply planning in the Urban Water Management Plan (UWMP), which is updated periodically.
- ◆ Requirements related to urban water management planning were amended in October 2001 by Senate Bills (SB) 610 and SB 221. SB 610 recognizes the need to link water supply and land use planning as currently required by Section 10910 of the California 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. 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 Alternative D of the LAX Master Plan, in conformance with the LADWP 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.²⁸⁹
- ◆ Los Angeles citywide water use was 679,000 acre-feet (AF) in the 2001-02 fiscal year.²⁹⁰ Water use for 2015 is projected to be 756,000 AF.²⁹¹ In its *Los Angeles Urban Water Management Plan*,²⁹² LADWP has designated a plan for supplying all of this demand. The UWMP projections take into account the water conservation programs that LADWP implements wherever possible. UWMP projections are based on regional growth projections prepared by the SCAG. SCAG projections include a growth factor for LAX. The growth associated with the No Action/No Project Alternative and

²⁸⁹ City of Los Angeles, Department of Water and Power, Water Resources Business Unit, Water Supply Availability Assessment for the Los Angeles World Airport - LAX Master Plan Project - Alternative D, June 10, 2003.

²⁹⁰ City of Los Angeles, Department of Water and Power, UWMP Annual Update, November 2002.

²⁹¹ City of Los Angeles, Department of Water and Power, Water Supply Fact Sheet, January 2003.

²⁹² City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 1995.

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Alternative D are generally consistent with SCAG-94 projections. The growth associated with Alternatives A, B, and C is higher than the growth factor used in these projections. Current City of Los Angeles planning indicates that supply will be sufficient to meet projected demands.²⁹³

- ◆ Reclaimed water in the LAX area is provided by the West Basin Municipal Water District's (WBMWD) West Basin Water Reclamation Plant (WBWRP). The WBWRP is a tertiary treatment plant and has a capacity of 43 million gallons per day (48,000 AF-yr). The capacity will be expanded to over 62 mgd (69,000 AF-yr) in 2005. LAX uses reclaimed water from the WBWRP for landscape irrigation. During 2002, 131 AF was delivered to LAX as part of the Westside Water Recycling Project.²⁹⁴
- ◆ Changes in conditions between 1996 and 2000 include modification of cargo, terminal, and ancillary facilities, and acquisition and demolition of 534 dwelling units within Manchester Square and Belford. These changes resulted in: 1) an increase in potable water use associated with airport-related activities by 12 AF-yr, an increase of 1 percent compared to the 1996 baseline; and 2) a decrease in potable water use within the Master Plan boundaries to 2230 AF-yr in 2000, a 3.5 percent decrease compared to the 1996 baseline (refer to **Table S4.25.1-1**, Potable Water Use Comparison, in Section 4.25.1.6 below).

4.25.1.4 Thresholds of Significance

4.25.1.4.1 CEQA Thresholds of Significance

As stated in Section 4.25.1, *Water Use* (subsection 4.25.1.4.1), of the Draft EIS/EIR, a significant water use impact would occur if the direct and indirect changes in the environment that may be caused by the particular build alternative would potentially result in one or more of the following future conditions:

- ◆ An exceedance of regional water supply and distribution capabilities due to project-related water demand.
- ◆ Interference with major water distribution facilities due to construction of project features.

These thresholds are utilized because they address the two potential impacts to water supply and distribution associated with the LAX Master Plan build alternatives: the potential for the project to exceed regional water supply and distribution capabilities, and the potential for interference with existing water distribution facilities due to construction of proposed Master Plan improvements. The first threshold was developed based upon guidance provided in the *Draft L.A. CEQA Thresholds Guide*.²⁹⁵ The second threshold was developed specifically to address potential impacts associated with the Master Plan alternatives relative to construction conflicts, which was not addressed in the *Draft L.A. CEQA Thresholds Guide*.

4.25.1.4.2 Federal Standards

As stated in section 4.25.1, *Water Use* (subsection 4.25.1.4.2), of the Draft EIS/EIR, the FAA *Airport Environmental Handbook* does not require that this environmental topic be addressed; therefore, no federal standards apply to the following analysis.

4.25.1.5 Master Plan Commitments

The following Master Plan commitments proposed for water use are materially the same as those presented in Section 4.25.1, *Water Use* (subsection 4.25.1.5), of the Draft EIS/EIR.

- ◆ **W-1. Maximize Use of Reclaimed Water (Alternatives A, B, C, and D).**

LAWA will maximize the use of reclaimed water in Master Plan-related facilities and landscaping. The intent of this commitment is to maximize the use of reclaimed water as an offset for potable water use in order to minimize the potential for increased water use resulting from implementation of the LAX Master Plan, and facilitate achievement of the City of Los Angeles' goal of increased beneficial use of its reclaimed water resources. This commitment will be implemented by various means, such

²⁹³ City of Los Angeles, Department of Water and Power, Integrated Plan for the Wastewater Program, Baseline Needs Technical Memorandum, April 2000.

²⁹⁴ City of Los Angeles, Department of Water and Power, Recycled Water Division.

²⁹⁵ City of Los Angeles, Draft L.A. CEQA Thresholds Guide, May 14, 1998.

as installation and use of reclaimed water distribution piping for landscape irrigation; use of appropriate construction material in the new Central Utility Plant (CUP) to allow for reclaimed water use for cooling (Alternatives A, B, and C), and double plumbing of terminals to allow use or reclaimed water for toilet flushing where practical.

◆ **W-2. Enhance Existing Water Conservation Program (Alternatives A, B, C, and D).**

LAWA will enhance the existing *Street Frontage and Landscape Plan* to ensure the ongoing use of water conservation practices at LAX facilities. The intent of this program will be to minimize the potential for increased water use due to implementation of the LAX Master Plan and act in accordance with regional efforts to ensure adequate water supplies for the future. Features of the enhanced conservation program will include identification of current water conservation practices and an assessment of their effectiveness; identification of alternate future conservation practices; continuation of the practice of retrofitting and installing new low-flow toilets and other water-efficient fixtures in all LAX buildings, as remodeling takes place or new construction occurs; use of Best Management Practices for maintenance; use of water efficient vegetation for landscaping, where possible; and continuation of the use of fixed automatic irrigation for landscaping.

◆ **PU-1. Develop a Utility Relocation Program (Alternatives A, B, C, and D).**

LAWA will develop and implement a utilities relocation program to minimize interference with existing utilities associated with LAX Master Plan facility construction. Prior to initiating construction of a Master Plan component, LAWA will prepare a construction evaluation to determine if the proposed construction will interfere with existing utility location or operation. LAWA will determine utility relocation needs and, for sites on LAX property, LAWA will develop a plan for relocating existing utilities as necessary before, during, and after construction of LAX Master Plan features. LAWA will implement the utility relocation program during construction of LAX Master Plan improvements.

4.25.1.6 Environmental Consequences

The environmental impacts to water use under the No Action/No Project Alternative and Alternatives A, B, and C have not materially changed from those described in Section 4.25.1, *Water Use* (subsection 4.25.1.6.1), of the Draft EIS/EIR. However, some of the water use numbers have been modified since publication of the Draft EIS/EIR to reflect changes in facility square footage and to correct errors (see **Table S4.25.1-1**). These modifications do not alter the conclusions of the Draft EIS/EIR. **Table S4.25.1-1**, Potable Water Use Comparison, identifies potable water use under each of the alternatives as well as under 1996 baseline and Year 2000 conditions. **Table S4.25.1-2**, Landscape-Related Reclaimed Water Use Comparison, provides an estimate of reclaimed water use for landscaping under each of the alternatives.

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Table S4.25.1-1

Potable Water Use Comparison (AF-yr)

	1996	Year	Alternatives 2015				
	Baseline	2000	NA/NP	A	B	C	D
LAX							
Airport Facilities	953	965	1,091	1,788	1,619	1,722 ¹	1,306
Belford	104	61	NA ²	NA ³	NA ³	NA ³	NA ²
Continental City	NA	NA	513	NA	NA	NA	NA
LAX Northside ⁴	NA	2	869	NA	NA	NA	869
Westchester Southside	NA	NA	NA	513	513	513	NA
Subtotal LAX⁵	1,057	1,028	2,473	2,301	2,132	2,235¹	2,176
Non-Project Uses Within Master Plan Boundaries⁶							
Manchester Square	362	309	NA	275 ⁷	NA ⁸	NA ⁸	NA ⁸
Land Within Acquisition Areas ⁹	892	892	892	180	35	432 ¹	801
Subtotal Non-Project Uses⁵	1,254	1,202	892	455	35	432¹	801
TOTAL MASTER PLAN BOUNDARIES⁵	2,311	2,230	3,365	2,755	2,167	2,667¹	2,977

NA = Not Applicable

¹ Modified since publication of the Draft EIS/EIR to correct a mathematical error. This modification does not alter the conclusions of the Draft EIS/EIR.

² Under the No Action/No Project Alternative and Alternative D, existing uses would be demolished. No redevelopment is assumed for purposes of this analysis.

³ Under Alternatives A, B, and C, existing uses within Belford would be demolished, and the area would be incorporated into the overall Master Plan development. Water use associated with proposed land uses in this area is incorporated within "Airport Facilities" above.

⁴ LAX Northside is currently subject to a trip cap (refer to Chapter 4, *Affected Environment, Consequences and Mitigation Measures* (Analytical Framework Section), of this Supplement to the Draft EIS/EIR). Under Alternative D, this trip cap would be reduced, which would effectively reduce the total amount of development allowed in LAX Northside. Therefore, water use in this area may be overstated.

⁵ Information in table may not total due to rounding.

⁶ For purposes of this analysis, a single composite study area was established, referred to as the "Master Plan boundaries." However, for each alternative, a portion of the study area would not be incorporated into the Master Plan development.

⁷ Under Alternative A, Manchester Square is assumed to be redeveloped with commercial/light industrial uses independent of the Master Plan.

⁸ Under Alternatives B, C, and D, existing uses within Manchester Square would be demolished, and the area would be incorporated into the overall Master Plan development. Water use associated with proposed land uses in this area is incorporated within "Airport Facilities" above.

⁹ No land within the acquisition areas would be acquired under the No Action/No Project Alternative. Only a portion of the land within the acquisition areas would be acquired for each build alternative. The land within the areas that would not be acquired would not be affected by the Master Plan and would remain in its current use.

Source: Camp Dresser & McKee Inc., 2003.

Table S4.25.1-2

Landscape-Related Reclaimed Water Use Comparison (AF-yr)

Alternative	2015
No Action/No Project Alternative	301
Alternative A	383
Alternative B	362
Alternative C	354
Alternative D	301

Source: Camp Dresser & McKee Inc., 2003.

4.25.1.6.1 Alternative D - Enhanced Safety and Security Plan

A complete description of the facilities associated with Alternative D is provided in Chapter 3, *Alternatives* (subsection 3.3.2), of this Supplement to the Draft EIS/EIR. The features of Alternative D that are relevant to the analysis of water use are summarized herein. Under Alternative D, the building area dedicated to terminal, cargo, and ancillary airport uses would increase, and the building area for maintenance uses would decrease slightly compared to baseline conditions. Alternative D would include development of LAX Northside. Existing uses in the acquisition areas would be demolished. As with Alternatives A, B, and C, uses within the ANMP properties (Belford and Manchester Square) will be demolished as part of a separate action being undertaken by LAWA. For purposes of this analysis, no redevelopment of the Belford property is assumed. The land within the acquisition areas and Manchester Square would be incorporated into the Master Plan.

Table S4.25.1-1 shows that, under Alternative D, water use from airport facilities would increase 353 AF-yr over baseline conditions by 2015 (a 37 percent increase). LAX Northside water use would be 869 AF-yr by 2015. Because of the reduction and elimination of water uses within the acquisition areas, as described previously, water use in the other areas within the LAX Master Plan boundaries would decrease from baseline conditions, and would partially offset increases in airport-related water use. However, Alternative D would result in higher water use within the acquisition areas, as compared to Alternatives A, B, and C, due to the lower total land acquisition required. Alternatives A, B, and C would acquire more land and convert it into airport uses; Alternative D would maintain substantially more of the existing land uses, with their higher water use.

Total water use within the Master Plan boundaries would increase 666 AF-yr over baseline conditions by 2015 (a 29 percent increase). Similar to Alternatives A, B, and C, Alternative D would result in less water use within the Master Plan boundaries in 2015 than would the No Action/No Project Alternative, although the difference would be smaller than with the other build alternatives. As with the other alternatives, LAWA would implement Master Plan Commitments W-1, Maximize Use of Reclaimed Water (Alternatives A, B, C, and D), and W-2, Enhance Existing Water Conservation Program (Alternatives A, B, C, and D), to reduce water use associated with Alternative D.

LADWP projects that there will be adequate water supply to meet city demands through 2015.²⁹⁶ This is consistent with the findings of an updated water availability assessment prepared by LADWP for Alternative D in accordance with the requirements of the California Water Code,²⁹⁷ which indicates that "adequate water supplies will be available to meet the water demands of the project."²⁹⁸ Because project-related water demand could be accommodated by the projected water supply, no significant adverse impacts relative to water supply would occur.

Under Alternative D, LAWA would implement Master Plan Commitment W-1 to maximize the use of reclaimed water in new facilities and within irrigated areas. Landscaped area at LAX under Alternative D would total approximately 102 acres in 2015 (see Table S4.10-2, Matrix of Acreages for Designated Plant Communities, in Section 4.10, *Biotic Communities*, of this Supplement to the Draft EIS/EIR). **Table S4.25.1-2**, Landscape-Related Reclaimed Water Use Comparison, shows reclaimed water use projections for Alternative D landscape requirements. With the planned expansion of existing reclaimed water production and existing distribution capacity, ample supply and facilities would be available to accommodate the demand for reclaimed water use associated with Alternative D. This is consistent with the water availability assessment prepared for the LAX Master Plan by LADWP. Therefore, no significant impacts with respect to reclaimed water supply would occur.

Similar to the other build alternatives, implementing Alternative D would alter the demands for fire flow pressure and its location at LAX. The fire flow requirements for Alternative D would be determined in conjunction with LAFD and would meet or exceed fire flow requirements in effect at the time. Fire flow requirements for new facilities would be evaluated during the design phase and incorporated into LAX Master Plan design and construction. The water availability assessment prepared for the other LAX Master Plan alternatives by LADWP indicates that "public fire protection for this project could be met from

²⁹⁶ City of Los Angeles, Department of Water and Power, Urban Water Management Plan, July 1995.

²⁹⁷ Water Code Section 10910, et. seq.

²⁹⁸ City of Los Angeles, Department of Water and Power, Water Resources Business Unit, Water Supply Availability Assessment for the Los Angeles World Airport - LAX Master Plan Project - Alternative D, June 10, 2003.

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existing and proposed water system facilities."²⁹⁹ Since the requirements of Alternative D would be the same or less than the other alternatives, the altered demand for fire flow pressures would be a less than significant impact. (The need for facility space and equipment to serve fire flow needs is analyzed in Section 4.26.1, *Fire Protection*, of this Supplement to the Draft EIS/EIR).

Alternative D would require new water distribution infrastructure, as well as relocating and renovating on-airport facilities. Reclaimed water infrastructure would also be provided as part of the design. The construction of this new infrastructure would be incorporated into the LAX Master Plan as part of Master Plan Commitment PU-1, LAX Master Plan Utility Relocation Program (Alternatives A, B, C, and D), and Master Plan Commitment W-1, Maximize Use of Reclaimed Water (Alternatives A, B, C, and D). The need for new and relocated facilities on the airport would be a less than significant impact.

As with other alternatives, Alternative D would potentially require adjustment/relocation of utilities in or near surrounding roadways and within LAX property. Potential utility conflicts during construction would be minimized with the implementation of a utility relocation program under Master Plan Commitment PU-1. Implementing this commitment would ensure that potential construction-related impacts would be less than significant.

Water would be required during construction of Master Plan improvements and LAX Northside. It is not possible to quantify this water usage with any level of certainty. Water usage for construction purposes would be temporary and would be considerably smaller than that required once facilities are operational. It is possible that reclaimed water could be used for dust suppression, reducing the quantity of potable water required. Construction water usage would be a less than significant impact.

4.25.1.7 Cumulative Impacts

The cumulative impacts to water use associated with the No Action/No Project Alternative and Alternatives A, B, or C, in combination with other past, present, and probable future projects, have not changed from those described in section 4.25.1, *Water Use* (subsection 4.25.1.7), of the Draft EIS/EIR.

4.25.1.7.1 Alternative D - Enhanced Safety and Security Plan

Water use under Alternative D would increase due to new development within the Master Plan boundaries and increases in passenger activity and aircraft operations compared to baseline conditions. To meet these needs, LADWP has performed an evaluation of water availability and has indicated that water use of this project falls within the anticipated growth range of the UWMP.

Alternative D would not result in an increase in population associated with direct employment. However, other projects in the vicinity, relocation of residents from the ANMP properties, and overall forecast growth would contribute to increased water demand within the region. It is uncertain to where resident relocation would occur, however, relocated residents and business may be accommodated by planned or proposed new developments with the LADWP service area and the service area of other water purveyors in the region. This would cause indirect cumulative increases in potable water demand within the region.

As indicated above, local and regional water supply planning efforts are preparing for future needs in the region and would account for increased water use caused by this growth. Therefore, impacts associated with cumulative increases in water use would be less than significant.

4.25.1.8 Mitigation Measures

Alternatives A, B, C, and D would not have any significant impacts relative to project-related water use. Master Plan Commitments W-1 and W-2 would reduce water use associated with these alternatives. In addition, Master Plan Commitment PU-1 would minimize potential conflicts with subsurface utilities during construction. As a result, none of the build alternatives would have significant impacts to water supply or water facilities during construction and no mitigation would be required.

²⁹⁹ Nuno, Luis, Distribution Engineering - Water, City of Los Angeles, Department of Water and Power, [Letter to Mr. Jim Ritchie, Los Angeles World Airports: Water Availability Assessment for the LAX Master Plan's Draft Environmental Impact Report](#), April 21, 2000. A copy of this correspondence is provided in Appendix C, *Agency Consultation Letters*, of the Draft EIS/EIR.

4.25.2 Wastewater (CEQA)

4.25.2.1 Introduction

The wastewater analysis addresses sanitary and industrial wastewater generation, as more fully described in Section 4.25.2, *Wastewater* (subsection 4.25.2.1), of the Draft EIS/EIR. Technical Report 15b, *Wastewater Technical Report*, of the Draft EIS/EIR, and Technical Report S-10b, *Supplemental Wastewater Technical Report*, contains calculations of projected wastewater generation.

4.25.2.2 General Approach and Methodology

The analysis of wastewater generation presented below is based on the general approach and methodology described in Section 4.25.2, *Wastewater* (subsection 4.25.2.2), of the Draft EIS/EIR. In addition, the analysis completed for this Supplement to the Draft EIS/EIR includes consideration of changes to baseline conditions (see Section 4.25.2.3 below), using the same methodology applied to the 1996 baseline analysis.

4.25.2.3 Affected Environment/Environmental Baseline

The affected environment/environmental baseline related to wastewater generation used in this Supplement to the Draft EIS/EIR is the same as described in Section 4.25.2, *Wastewater* (subsection 4.25.2.3), of the Draft EIS/EIR. However, some of the baseline wastewater generation numbers have been modified to reflect changes in square footage of facilities and to correct errors (refer to **Table S4.25.2-1**, Wastewater Generation Comparison, in Section 4.25.2.6 below). A discussion of Year 2000 conditions is provided below. Where appropriate, information current to 2002 is provided. This information does not alter the conclusions of the Draft EIS/EIR.

- ◆ The City of Los Angeles operates four wastewater treatment facilities that provide sewage treatment for most of the city's incorporated area and for several other cities and unincorporated areas in the Los Angeles region. Sanitary wastewater generated by activities at LAX is treated at Hyperion Treatment Plant (HTP). HTP is located adjacent to the southwest boundary of LAX, approximately two miles southwest of the Central Terminal Area (CTA). Presently, HTP has a design capacity of 450 million gallons per day (mgd). Average flows at HTP were 352 mgd in April 2000. Recently, flows have decreased. In April 2002, average flows at HTP were 331 mgd, leaving an excess capacity of almost 120 mgd.³⁰⁰
- ◆ The *Los Angeles General Plan Framework* calls for wastewater treatment plant capacity to be developed as needed.³⁰¹ That process is underway as the City of Los Angeles develops a Wastewater Facilities Plan. The first phase of that plan, the Integrated Plan for Wastewater Program (IPWP), has been completed. The second phase, the Integrated Resource Plan (IRP) is under development and will be completed during 2003. Based on the original IPWP projections, wastewater flows to HTP were anticipated to exceed the facility's capacity in 2020.³⁰² As part of the IRP, the City is in the process of refining its projected wastewater system capacity. The IRP will also provide system operation and facilities options to determine how best to meet the City's future wastewater treatment needs.
- ◆ Changes in conditions between 1996 and 2000 include modifications to cargo, terminal, and ancillary facilities, and acquisition and demolition of 534 dwelling units within Manchester Square and Belford. These changes resulted in: 1) an increase in wastewater generation associated with airport-related activities by 10,274 gpd, an increase of 1.3 percent compared to the 1996 baseline; and 2) a decrease in wastewater generation within the Master Plan boundaries to 1.94 mgd in 2000, a 3.7 percent decrease compared to the 1996 baseline (refer to **Table S4.25.2-1**, Wastewater Generation Comparison, in Section 4.25.2.6 below).

³⁰⁰ City of Los Angeles Department of Public Works, Bureau of Sanitation, April 2002 Monthly Report for Hyperion Treatment Plant.

³⁰¹ Envicom Corp., *City of Los Angeles Citywide General Plan Framework*, December 1996.

³⁰² City of Los Angeles, Department of Public Works, Bureau of Sanitation, *Integrated Plan for the Wastewater Program, Baseline Needs Technical Memorandum*, April 2000.

4.25.2 Wastewater (CEQA)

4.25.2.4 Thresholds of Significance

4.25.2.4.1 CEQA Thresholds of Significance

As stated in Section 4.25.2, *Wastewater* (subsection 4.25.2.4.1), of the Draft EIS/EIR, a significant wastewater generation impact would occur if the direct and indirect changes in the environment that may be caused by the particular build alternative would potentially result in one or more of the following future conditions:

- ◆ An exceedance in the capacities of regional wastewater collection and treatment facilities due to project-related wastewater generation.
- ◆ Interference with major wastewater collection facilities due to construction of project features.

These thresholds of significance are utilized because they address the two potential impacts to wastewater collection and treatment associated with the LAX Master Plan alternatives: the potential for the project to exceed regional wastewater collection and treatment capabilities; and the potential for the construction of proposed facilities to interfere with existing wastewater collection infrastructure. The first threshold was developed based upon guidance provided in the *Draft L.A. CEQA Thresholds Guide*³⁰³ to address potential impacts to collection and treatment capabilities and infrastructure. The second threshold was developed specifically to address potential impacts associated with the Master Plan Alternatives relative to construction conflicts, which was not addressed in the *Draft L.A. CEQA Thresholds Guide*.

4.25.2.4.2 Federal Standards

As stated in Section 4.25.2, *Wastewater* (subsection 4.25.2.4.2), of the Draft EIS/EIR, the *FAA Airport Environmental Handbook* does not require that this environmental topic be addressed; therefore, no federal standards apply to the following analysis.

4.25.2.5 Master Plan Commitments

The following Master Plan commitment proposed for wastewater is the same as that presented in Section 4.25.2, *Wastewater* (subsection 4.25.2.5), of the Draft EIS/EIR.

- ◆ **PU-1. Develop a Utility Relocation Program (Alternatives A, B, C, and D).**

LAWA will develop and implement a utilities relocation program to minimize interference with existing utilities associated with LAX Master Plan facility construction. Prior to initiating construction of a Master Plan component, LAWA will prepare a construction evaluation to determine if the proposed construction will interfere with existing utility location or operation. LAWA will determine utility relocation needs and, for sites on LAX property, LAWA will develop a plan for relocating existing utilities as necessary before, during and after construction of LAX Master Plan features. LAWA will implement the utility relocation program during construction of LAX Master Plan improvements.

4.25.2.6 Environmental Consequences

The environmental impacts related to wastewater generation under the No Action/No Project Alternative and Alternatives A, B, and C have not materially changed from those described in Section 4.25.2 *Wastewater* (subsection 4.25.2.6), of the Draft EIS/EIR. However, some of the wastewater generation numbers have been modified since publication of the Draft EIS/EIR to reflect changes in square footage of facilities and to correct errors (see **Table S4.25.2-1** below). These modifications do not alter the conclusions of the Draft EIS/EIR. **Table S4.25.2-1** identifies wastewater generation under each of the alternatives as well as under 1996 baseline and Year 2000 conditions.

³⁰³ City of Los Angeles, *Draft L.A. CEQA Thresholds Guide*, May 14, 1998.

Table S4.25.2-1

Wastewater Generation Comparison (gpd)

	1996	Year	Alternatives 2015				
	Baseline	2000	NA/NP	A	B	C	D
LAX							
Airport Facilities	797,672	807,946	921,383 ¹	1,520,612	1,379,111	1,442,284 ¹	1,104,188
Belford	93,280	54,400	NA ²	NA ³	NA ³	NA ³	NA ²
Continental City	NA	NA	458,000	NA	NA	NA	NA
LAX Northside ⁴	NA	1,350	775,955 ¹⁰	NA	NA	NA	775,955
Westchester Southside	NA	NA	NA	458,460	458,460	458,500	NA
Subtotal LAX⁵	890,952¹	863,696	2,155,338	1,979,072	1,837,571	1,900,784¹	1,880,143
Non-Project Uses Within Master Plan Boundaries⁶							
Manchester Square	323,360	276,400	NA	245,200 ⁷	NA ⁸	NA ⁸	NA ⁸
Land Within Acquisition Areas ⁹	796,764	796,765	796,764	160,318	31,089	385,767 ¹	715,121
Subtotal Non-Project Uses⁴	1,120,124	1,073,165	796,764	405,518	31,089	385,767¹	715,121
TOTAL MASTER PLAN BOUNDARIES⁵	2,011,076¹	1,936,861	2,952,102¹	2,384,590	1,868,660	2,286,551	2,595,263

NA = Not Applicable

- ¹ Modified since publication of the Draft EIS/EIR to correct an error. This modification does not alter the conclusions of the Draft EIS/EIR.
- ² Under the No Action/No Project Alternative and Alternative D, existing uses would be demolished. No redevelopment is assumed for purposes of this analysis.
- ³ Under Alternatives A, B, and C, existing uses within Belford would be demolished, and the area would be incorporated into the overall Master Plan development. Wastewater generation associated with proposed land uses in this area is incorporated within "Airport Facilities" above.
- ⁴ LAX Northside is currently subject to a trip cap (refer to Chapter 4, *Affected Environment, Consequences and Mitigation Measures* (Analytical Framework Section), of this Supplement to the Draft EIS/EIR. Under Alternative D, this trip cap would be reduced, which would effectively reduce the total amount of development allowed in LAX Northside. Therefore, this generation value may be over stated.
- ⁵ Information in table may not total due to rounding.
- ⁶ For purposes of this analysis, a single composite study area was established, referred to as the "Master Plan boundaries." However, for each alternative, a portion of the study area would not be incorporated into the Master Plan development.
- ⁷ Under Alternative A, Manchester Square is assumed to be redeveloped with commercial/light industrial uses independent of the Master Plan.
- ⁸ Under Alternatives B, C, and D, existing uses within Manchester Square would be demolished, and the area would be incorporated into the overall Master Plan development. Wastewater generation associated with proposed land uses in this area is incorporated within "Airport Facilities" above.
- ⁹ No land within the acquisition areas would be acquired under the No Action/No Project Alternative. Only a portion of the land within the acquisition areas would be acquired for each build alternative. The land within the areas that would not be acquired would not be affected by the Master Plan and would remain in its current use.
- ¹⁰ Modified since publication of the Draft EIS/EIR to correct a mathematical error. This modification does not alter the conclusions of the Draft EIS/EIR.

Source: Camp Dresser & McKee Inc., 2003.

4.25.2.6.1 Alternative D - Enhanced Safety and Security Plan

A complete description of the facilities associated with Alternative D is provided in Chapter 3, *Alternatives* (subsection 3.3.2), of this Supplement to the Draft EIS/EIR. The features of Alternative D that are relevant to the analysis of wastewater generation are summarized herein. Under Alternative D, the building area dedicated to terminal, cargo, and ancillary airport uses would increase, and the building area for maintenance uses would decrease slightly compared to baseline conditions. Alternative D would include the development of LAX Northside. Existing uses in the acquisition areas would be demolished. As with Alternatives A, B, and C, uses within the ANMP properties (Belford and Manchester Square) will be demolished as part of a separate action being undertaken by LAWA. For purposes of this analysis, no redevelopment of the Belford property is assumed. The land within the acquisition areas and Manchester Square would be incorporated into the Master Plan.

4.25.2 Wastewater (CEQA)

Table S4.25.2-1 shows that under Alternative D, wastewater generation from airport-related land uses would increase 306,516 gpd over baseline conditions by 2015 (a 38 percent increase).

Because of the reduction and elimination of some high wastewater generation uses within the acquisition areas, wastewater generation in the other areas within the LAX Master Plan boundaries would decrease somewhat from baseline conditions, and would partially offset increases in airport-related wastewater generation. Alternative D would result in higher wastewater generation within the acquisition areas, as compared to Alternatives A, B, and C, due to the lower total land acquisition required. The other alternatives, particularly Alternatives A and B, would require more land to be converted into airport uses; Alternative D would maintain substantially more of the existing land uses, with their higher wastewater generation rates. Total wastewater generation within the Master Plan boundaries would increase 584,187 gpd over baseline conditions by 2015 (a 29 percent increase). Similar to Alternatives A, B, and C, Alternative D would result in less wastewater generation within the Master Plan boundaries in 2015 than would the No Action/No Project Alternative, although the difference would be smaller than with the other build alternatives.

As previously noted, HTP has a design capacity of 450 mgd, and currently has excess wastewater capacity. It is anticipated that the 0.58 mgd increase in wastewater generation associated with Alternative D in 2015, compared to baseline conditions, could be accommodated by the existing wastewater treatment facilities at HTP. Therefore, the impact associated with increased wastewater generation for this alternative would be less than significant.

Maintenance and industrial uses at LAX would decrease only slightly (approximately 5 percent) under Alternative D. As a result, it is anticipated that industrial wastewater discharges would be similar to baseline conditions.

Alternative D would require new wastewater collection infrastructure, as well as relocating and renovating on-airport facilities. The construction of this new infrastructure would be incorporated into the LAX Master Plan as part of Master Plan Commitment PU-1, Develop a Utility Relocation Program (Alternatives A, B, C, and D). Given the existing surplus capacity of the outfall sewers, it is anticipated that regional wastewater collection pipelines would be adequate to accommodate increases in wastewater generation for this alternative. Because the project would be designed to provide the requisite wastewater infrastructure, the need for new and relocated facilities on the airport would be a less than significant impact.

Construction of subsurface structures as part of Alternative D may interfere with existing wastewater collection infrastructure. As discussed in Section 4.25.2, *Wastewater* (subsection 4.25.2.3), of the Draft EIS/EIR, three major sewer outfalls, the North Central Outfall Sewer (NCOS), North Outfall Relief Sewer (NORS), and Central Outfall Sewer (COS), underlie LAX. Construction of major subsurface structures, such as the proposed APM, and the consolidated RAC facility, as well as improvement to the CTA and the south airfield, could potentially interfere with these outfalls. The NCOS and NORS are larger and deeper than the COS and, based on a preliminary analysis performed by MARRS³⁰⁴ design and construction would be performed so Alternative D would not interfere with these sewers. However, the COS crosses Sepulveda Boulevard at a depth of 10 feet, the CTA at 10 to 25 feet, and Imperial Highway at 5 to 10 feet. Based on preliminary engineering analysis, it appears that the COS would be affected by the Alternative D construction and would require relocation or modification. Under Master Plan Commitment PU-1, a utility relocation program would be implemented during construction to minimize potential impacts on existing subsurface utilities and ensure that potential impacts on existing wastewater outfalls would be less than significant.

4.25.2.7 Cumulative Impacts

The cumulative impacts to wastewater generation associated with the No Action/No Project Alternative and Alternatives A, B, or C, in combination with other past, present, and probable future projects, have not changed from those described in Section 4.25.2, *Wastewater* (subsection 4.25.2.7), of the Draft EIS/EIR.

³⁰⁴ MARRS, LAX Master Plan Alternative D Environmental Data Memorandum, August 27, 2002.

4.25.2.7.1 Alternative D - Enhanced Safety and Security Plan

Demand for wastewater treatment facilities under Alternative D would increase due to new development within the Master Plan boundaries, and increases in passenger activity and aircraft operations compared to baseline conditions. To meet these needs, extensive planning efforts currently underway would ensure adequate wastewater treatment capacity to accommodate project-related flows.

Alternative D would not result in an increase in population associated with direct employment. However, relocation of residents from Manchester Square and overall forecast growth would contribute to increased wastewater treatment demands within the region. It is uncertain to where resident relocation would occur, however, relocated residents and businesses may be accommodated by planned or proposed new developments within the HTP service area and the service area of other wastewater treatment plants in Los Angeles. This would cause indirect cumulative increases in wastewater generation within the region.

In considering impacts associated with related project development in the airport vicinity, the proposed Playa Vista development, in combination with Alternative D, would directly increase cumulative wastewater generation in the region. Other developments within the region would also increase cumulative wastewater generation.

The HTP is anticipated to have insufficient capacity to treat projected wastewater flows through 2020 based on projected regional growth assumed in the IPWP. This projected shortfall in future treatment capacity is anticipated to occur irrespective of which Master Plan alternative is selected. With implementation of the City's Wastewater Facilities Plan, additional wastewater treatment capacity would be available and the cumulative wastewater generation associated with Alternative D and related cumulative projects would not exceed treatment capacity. Under those conditions, there would be no significant impact. However, at the time of preparation of this Supplement to the Draft EIS/EIR, the IPWP-IRP is still under preparation and the means for accommodating the projected wastewater flows have not yet been selected from the various options currently being considered. As such, capacity to treat cumulative wastewater flows at HTP is not assured at this time; hence, the cumulative impact related to wastewater is considered to be potentially significant.

4.25.2.8 Mitigation Measures

Alternatives A, B, C, and D would not have any significant impacts relative to project-related wastewater generation and treatment capacity. Therefore, no mitigation would be required. Master Plan Commitment PU-1 would minimize potential conflicts with subsurface utilities during construction. As a result, none of the build alternatives would have significant impacts to wastewater facilities during construction, and no mitigation would be required.

The following mitigation measure is the same as that identified in Section 4.25.2, *Wastewater* (subsection 4.25.2.8), of the Draft EIS/EIR and is recommended to reduce cumulative wastewater impacts:

◆ **MM-WW-1. Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows (Alternatives A, B, C, and D).**

Additional wastewater capacity within the City of Los Angeles should be provided by the expansion/upgrade of the city's wastewater treatment systems via a combination of improvements to address the projected wastewater shortfall resulting from cumulative development. Such improvements could include increasing capacity at HTP, building new reclamation capacity upstream of HTP, conservation of potable water, and infiltration/inflow reduction. Implementation of this mitigation measure is the responsibility of the City of Los Angeles Department of Public Works, Bureau of Sanitation. Specific improvements will be identified in the City's IPWP and Wastewater Facilities Plan. The cost for implementing this mitigation measure would be passed on to LAX and other wastewater generators through increased wastewater fees.

4.25.2.9 Level of Significance After Mitigation

4.25.2.9.1 Alternatives A, B, and C

As stated in Section 4.25.2, *Wastewater* (subsection 4.25.2.9), of the Draft EIS/EIR, cumulative impacts from development of Alternatives A, B, or C could be mitigated through implementation of MM-WW-1, Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows (Alternatives A,

4.25.2 Wastewater (CEQA)

B, C, and D). Implementation of this mitigation measure is the responsibility of another agency. If this mitigation measure is not fully implemented, cumulative impacts associated with wastewater generation and treatment would remain significant.

4.25.2.9.2 Alternative D

The cumulative impacts from development of Alternative D could be mitigated through implementation of MM-WW-1, Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows (Alternatives A, B, C, and D). Implementation of this mitigation measure is the responsibility of another agency. If this mitigation measure is not fully implemented, cumulative impacts associated with wastewater generation and treatment would remain significant.