



LAX MASTER PLAN
**MITIGATION MONITORING AND
REPORTING PROGRAM (MMRP)**

**2008 ANNUAL
PROGRESS REPORT**

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Los Angeles World Airports

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Prepared by

Los Angeles World Airports

LAX Master Plan MMRP Annual Progress Report December 2008

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1.0 Executive Summary

Los Angeles City Council certified the LAX Master Plan Final Environmental Impact Report (FEIR) and adopted the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP) on December 7, 2004. Pursuant to Section 15097 of the California State CEQA Guidelines, the lead agency, Los Angeles World Airports (LAWA) is responsible for reporting, monitoring, and ensuring implementation of all applicable mitigation measures in accordance with the adopted MMRP. This document is the fourth annual progress report for the LAX Master Plan MMRP. This report provides a status update on applicable mitigation activities, policies and programs that have been and are being implemented by LAWA to ensure compliance with mitigation measures identified in the LAX Master Plan FEIR.

Additional project specific mitigation measures were identified in the South Airfield Improvement Project Final Environmental Impact Report (SAIP FEIR), the first project-level tiered environmental review document for the LAX Master Plan Program. Los Angeles City Council approved the SAIP and certified the FEIR on January 11, 2006. Los Angeles City Council also adopted a SAIP MMRP to mitigate or avoid potentially significant effects on the environment during construction of the project. The status of the SAIP project-specific mitigation measures are also reported in this document.

Mitigation measures applicable to the LAX Master Plan and the SAIP are in the process of being implemented. Mitigation measures are implemented, monitored, and reported on in accordance to four main categories: (1) Program plans; (2) Construction-related mitigation measures; (3) Design mitigation requirements; and (4) "Stand-alone" mitigation plans.

Program plans are documents that address program-wide mitigation measures specified in the LAX Master Plan MMRP and provide a framework to clearly identify the mitigation measure, define the process of implementation, and establish monitoring and reporting requirements. Some of the program plans are required to update existing operating procedures within appropriate LAWA Divisions and some program plans may be required to develop new procedures and guidelines. Examples of updating existing operations include the maintenance of applicable elements of existing Aircraft Noise Abatement Program (ANAP) or implementing a Revised Aircraft Noise Mitigation Program. New program plans were developed to address specific mitigation measures from the MMRP, such as, the Mitigation Plan for Air Quality (MPAQ) to address air quality impacts. To mitigate or avoid potential significant impacts on the environment during construction, construction-related mitigation measures were implemented by requiring the Construction Contractors to comply with specific environmental requirements. Key areas of mitigation include reduction of traffic impacts by requiring construction deliveries not to coincide with peak traffic periods; and construction equipment replacements and/or retrofit for noise control and reduction of air pollution. Some mitigation measures, such as measures to maximize use of reclaimed water, were incorporated into the design of the SAIP project and will be incorporated into all other LAX Master Plan projects during the design process. "Stand-alone" mitigation plans are specifically developed to address specific impacts that are not linked to any particular project within the LAX Master Plan. These stand-alone plans are summarized in Section 6.0 of this report.

2.0 Introduction/Background

In December 2004, the Los Angeles City Council approved the LAX Master Plan and related entitlements for the future development of LAX. The LAX Master Plan allows for the first major new facilities for, and improvements to, the airport since 1984, and plans how projected growth in passengers and cargo at LAX can be accommodated, in part, through the year 2015. The approved LAX Master Plan includes airfield modifications, development of new terminals, and new landside facilities to accommodate passenger and employee traffic, parking, and circulation. The LAX Master Plan serves as a broad policy statement regarding the conceptual strategic planning framework for future improvements at LAX and working guidelines to be consulted by Los Angeles World Airports (LAWA) as it formulates and processes site-specific projects under the LAX Master Plan program.

Together with its approval of the LAX Master Plan, the Los Angeles City Council certified the LAX Master Plan Final Environmental Impact Report (FEIR) and adopted the LAX Master Plan Mitigation Monitoring and Reporting Program (MMRP). The MMRP (reference **Appendix A**) documents all mitigation measures set forth in the FEIR. The basic framework of, and requirements for, the MMRP were established in conjunction with approval of the LAX Master Plan and are anticipated to remain in effect throughout implementation of the Master Plan. If additional new mitigation measures are required in conjunction with subsequent environmental (i.e., CEQA) review of individual projects proposed under the Master Plan, such as the South Airfield Improvement Project (SAIP), the MMRP will be updated in a similar manner to include such additional project-specific measures. **Appendix B** includes the subsequent project-specific MMRP documents for the SAIP: (1) an MMRP index delineating which Master Plan commitments and mitigation measures are included within the overall MMRP; (2) Administrative refinements to the LAX Master Plan; (3) and two project-specific new mitigation measures applicable to the SAIP.

An MMRP Index included in Appendix B provides a comprehensive delineation of all Master Plan commitments, Master Plan mitigation measures, and project-specific mitigation measures adopted to date, and indicates where within Appendix A the complete text of each measure can be found, as well as an indication of the origin of each measure (i.e., the LAX Master Plan FEIR, the FAA Final Environmental Impact Statement and Record of Decision, or the South Airfield Improvement Project FEIR). The MMRP Index provides the most current and comprehensive delineation of which Master Plan commitments and mitigation measures are included within the overall MMRP, recognizing that, if other new mitigation measures are added, the MMRP Index will be updated accordingly.

The primary purpose of this report is to document and report on the status of the current and recently completed mitigation measures set forth in the LAX Master Plan MMRP.

3.0 LAX Master Plan Program Plans

Over half of the mitigation measures from the LAX Master Plan MMRP can be addressed by implementing comprehensive program plans such as those identified in **Appendix C**. Program plans are documents that address program-wide mitigation measures under the Master Plan by providing a framework to clearly identify these measures, define the process of implementation, and establish monitoring and reporting requirements. Program plans provide sufficient detail and functionality to address the compliance activities needed to satisfy the mitigation measures (i.e. Aircraft Noise Mitigation Program, Mitigation Plan for Air Quality, etc.). Appendix C lists program plans associated with the LAX Master Plan MMRP with applicable mitigation measures addressed and a brief description of each plan. Appendix C also identifies which program plans are triggered by the SAIP and the status of each plan as of December 2007. Denoted by **BOLD** font, there are 13 program plans triggered by the SAIP.

Status→ Implemented:

Thirteen (13) of the seventeen (17) program plans are applicable or were triggered by the first LAX Master Plan project, the SAIP. Of these thirteen plans, LAWA has developed 12 program plans and has implemented applicable provisions of each program plan to the SAIP. The 13th program plan, SAIP Habitat Replacement Plan, was developed concurrent with the construction of the SAIP.

4.0 Design-Related Mitigation Requirements

Design mitigation measures are requirements that are being incorporated during the design phase of all on-going Master Plan Projects.

Examples of design mitigation measures that are being incorporated into upcoming and on-going Master Plan Projects are briefly described below:

<u>MMRP Commitment or Mitigation Measure</u>	<u>Implementation Requirement</u>
E-2 Coordination with Utility Providers	E-2 is a commitment from the LAX Master Plan MMRP. During the design process, the project design team will coordinate with all affected utility providers to ensure compatibility.
W-1 Maximize Use of Reclaimed Water	W-1 is a commitment from the LAX Master Plan MMRP. During the design process, the project design team will include a design requirement for the Contractor to utilize reclaimed water as feasible to satisfy this commitment.
FP-1 LAFD Design Recommendations	FP-1 is a commitment from the LAX Master Plan MMRP. This requires the Design team to work with LAFD to prepare plans that contain appropriate design features, such

as emergency access, fire flow requirements, fire hydrants, private roadway access for fire department equipment, and other recommendations.

Status→ On-going

Design plans will and have incorporated the above requirements during the design phase of a Master Plan project. Currently, there are two Master Plan Projects actively in the design phase. Those are the Crossfield Taxiway Project (CFTP) and the TBIT Reconfiguration Project.

5.0 Construction-Related Mitigation - South Airfield Improvement Project (SAIP)

The SAIP is the first and the only Master Plan Project completed at this time.

As shown in the MMRP Index in Appendix B, the SAIP Final EIR identified mitigation measures from the LAX Master Plan MMRP and two project-specific mitigation measures, MM-BC(SA)-1 and MM-BC(SA)-2 applicable to the construction of the SAIP. Construction related mitigation measures were complied with by incorporating mitigation requirements into the construction contract specifications for the SAIP. For a detailed description of each mitigation measure, please reference Appendix A, the LAX Master Plan MMRP. All applicable SAIP mitigation measures were implemented during construction and monthly progress reports were available at the project construction site. Described herein is a brief progress summary on key mitigation measures, such as air quality, noise, and traffic for the SAIP.

5.1 Project Description

The South Airfield Improvement Project (SAIP) was the first LAX Master Plan project to be implemented. The project improved airport safety by changing the way aircraft moves about LAX's South Airfield. LAX had been experiencing a number of runway incursions where there was potential for contact between aircraft. To reduce the potential for runway incursion, the SAIP provided a new parallel center taxiway between the two South Airfield runways at LAX.

To accommodate the new 75 foot-wide center taxiway, Runway 7R-25L was relocated approximately 55 feet to the south of its old centerline location. The relocation of Runway 7R-25L included the relocation and replacement of runway pavement, navigational and visual aids, and other associated site work such as utilities, lighting, signage, grading, drainage and structural improvements over the Sepulveda Tunnel.

The project minimized the potential for runway incursions by reconfiguring the existing high-speed taxiways on the South Airfield that directly crossed the departure runway (Runway 7L-25R). Arriving aircraft on the southern-most runway (Runway 7R-25L) now taxi onto the new parallel center taxiway and hold until it is clear to cross Runway 7L-25R.

The project began construction in March 2006 and was completed September 2008. The runway phase of the project was completed ahead of schedule and opened for use in early April 2007.

5.2 Key Construction-Related Mitigation Measures Implemented

5.2.1 Air Quality:

In accordance with the LAX MMRP MM-AQ-1, LAWA developed a Final Draft LAX Master Plan Mitigation Plan for Air Quality (LAX MP-MPAQ) in October 2005. This Plan was comprised of the Framework (MM-AQ-1), Construction-Related Mitigation Measures (MM-AQ-2), Transportation-Related Mitigation Measures (MM-AQ-3), and Operations-Related Mitigation Measures (MM-AQ-4). The purpose of the LAX MP-MPAQ was to reduce air pollutant emissions associated with implementation of the LAX Master Plan to levels equal to, or less than, the thresholds of significance identified in the Final EIR for the project. The LAX MP-MPAQ included feasible mitigation measures grouped into three (3) categories: 1) Construction-Related Measures; 2) Transportation-Related Measures, and; 3) Operations-Related Measures. Please see Section 6.2, Mitigation Plan for Air Quality, for an update of the “stand-alone” air quality mitigation plans MM-AQ-1 through MM-AQ-4.

The second component of the LAX MP-MPAQ, MM-AQ-2 Construction-Related Mitigation Measures were applicable to the SAIP. In accordance with MM-AQ-2, the below list of applicable measures, grouped in six (6) categories, were implemented during the entire construction duration of the SAIP.

5.2.1.1 Fugitive Dust Source Controls: Fugitive Dust Source Controls were designed to reduce the generation of wind-blown dust from construction areas, haul roads and stockpiles of raw materials. LAWA approved a Fugitive Dust Control Plan (FDCP) submitted by the SAIP construction contractor and enforced measures identified in the plan. In general, the SAIP project construction complied with Rule 403 of the SCAQMD. A daily log/checklist of fugitive dust mitigation measures developed by SCAQMD were used and submitted for LAWA’s compliance review. Watering, dust suppressants, and non-toxic chemical stabilizers were the primary dust control measures for earth moving operations, disturbed soils and surface areas, unpaved roads, crushing operations, and all other construction activities that had the potential to contribute to the formation of fugitive dust. A publicly visible sign was posted within 50 feet of the project site entrance that included a contact person and phone number for dust-related complaints.

5.2.1.2 On-Road Mobile Source Controls: On-Road Mobile Source Controls were designed to reduce the potential impact from the exhaust of construction-worker vehicles and other construction vehicles and equipment on the public roadway network. The SAIP construction employee work/commute hours were scheduled during off-peak hours and the construction contractor made on-site lunch trucks available during construction to minimize off-site worker vehicle trips. Also, LAWA enforced the CARB Vehicle Idling Rule (Airborne Toxic Control Measure (ACTM)) to Limit Diesel Commercial Motor Vehicle Idling, CCR Title 13 Section 2485 for all on-road construction-related

vehicles. This included briefings to vehicle drivers and equipment operators as well as the posting of idling restriction signage at construction area access gates and vehicle staging areas.

5.2.1.3 Non-Road Mobile Source Controls: Non-road Mobile Source Controls were designed to reduce potential impacts from the exhaust of heavy construction vehicles and equipment operating on the construction site. LAWA enforced the Contractor Vehicle Idling Rule as strictly as CARB commercial idling restrictions. Another mitigation measure prohibited staging or parking of construction vehicles (including workers' vehicles) on streets adjacent to sensitive receptors such as schools, daycare centers, and hospitals. A designated staging area and batch plant facility were established for the SAIP project site to minimize off-site truck haul trips. A contractor employee parking area was designated and workers were shuttled into the jobsite.

In addition, LAWA required the construction contractor to utilize Best Available Emission Control Technology (BACT) for all diesel equipment used during construction to reduce diesel emissions of PM, including fine PM, and secondarily, to reduce emissions of NOx. Exemptions were granted only if the Contractor provided written findings, based upon appropriate market research, that the best available emission control device for a particular piece of equipment was unavailable or impractical. Exemptions were also approved for construction equipment used on the construction site for fewer than 20 calendar days per calendar year. In addition, LAWA contracted with an independent third party to monitor the above BACT requirement in accordance with the Community Benefits Agreement. Additional detailed information on the BACT requirement, monitoring, and reporting is described in a separate report, the 2008 Community Benefits Agreement Progress Report, that is available at LAWA and posted on LAWA's website <http://www.laxmasterplan.org> for review.

5.2.1.4 Stationary Point Source Controls: Stationary Point Source Controls were designed to reduce emissions from generators and other power-producing devices used on the construction site. The SAIP construction contractor was required to use Ultra Low Sulfur Diesel fuel for all construction equipment, including stationary generators. LAWA and the construction contractor coordinated with the City's Department of Water and Power (DWP) to utilize electric grid power to operate stationary equipment when feasible.

5.2.1.5 Mobile and Stationary Source Controls: The Mobile and Stationary Source controls were designed to reduce the potential impact from construction activities during pollution alert periods and to reduce overall emissions by using appropriate equipment and fuels. In accordance with the SAIP contract specifications, the construction contractor was required to submit a daily log of air quality forecast monitoring/second-stage smog alert periods in the immediate vicinity of the Project. If and when a second-stage smog alert occurred, the Contractor was obligated to suspend use of all construction equipment. There were no second stage smog alerts issued during the SAIP construction.

Although not specifically required by the MMRP, the Contractor was required by California law to use Ultra Low Sulfur Diesel for all on-road and off-road construction-related equipment. In addition, the Contractor was required to utilize construction equipment having the minimum practical engine size (i.e., lowest appropriate horsepower rating for intended job). LAWA required all construction equipment to be properly maintained in accordance with manufacturers' specifications and schedules and monitored compliance with equipment maintenance schedules. All maintenance and repair records were submitted by the contractor at the request of LAWA and a policy was adopted prohibiting the contractor from tampering with construction equipment to increase horsepower or to defeat emission control devices.

5.2.1.6 Administrative Controls: Administrative Controls called for the designation and employment of Mitigation Monitors to monitor and report on the implementation of mitigation measures contained in MM-AQ-2. LAWA designated an environmental mitigation monitor from the Construction Management Team to coordinate with the Contractor's environmental compliance officer to ensure implementation of all components of the construction-related measures. This was accomplished through direct inspections, records reviews, and investigation of complaints.

5.2.2 Noise:

Consistent with the requirements set forth in MM-N-7 Construction Noise Control Plan of the LAX MMRP, LAWA and the SAIP construction contractor implemented a Construction Noise Control Plan (CNCP) for the entire duration of the construction of the SAIP. The CNCP included feasible measures to reduce potential noise impacts throughout the construction period near noise sensitive uses. The CNCP described anticipated noise levels of proposed construction equipment and activities and noise mitigation methods. The construction Contractor was required to maintain acceptable noise levels during construction. In July, 2006, LAWA implemented a 24-hour construction noise hotline program for the general public to file noise complaints and within one hour, LAWA investigated the complaint and communicated the results of the investigation to complainants. The monthly noise hotline report for February 2008 is provided in **Appendix D**. February was the only month a call was received in 2008.

5.2.3 Traffic:

In accordance with the LAX MMRP, a number of mitigation measures relating to traffic impacts were applicable to the SAIP. LAWA and the SAIP construction contractor implemented a Construction Traffic Management Plan (CTMP) to mitigate potential traffic congestion during both peak and off-peak periods. Haul routes were located away from residential areas and were maintained regularly by the Contractor. Construction signage was provided for traffic management. Construction employee work hours were established to avoid peak and off-peak periods to minimize employee trips to and from the project site. LAWA established a designated employee parking location for construction workers with a shuttle system to transport workers to and from the project site.

Status → Completed:

Construction mitigation measures were included as specification language in the Contractor's contract documents and were enforceable with penalty clauses for non-compliance. These construction mitigation requirements remained in effect throughout the construction period and were monitored and reported on weekly.

6.0 "Stand-Alone" Mitigation Plans

"Stand-alone" mitigation plans are derived from specific mitigation measures to address the overall impacts of the LAX Master Plan. These stand-alone plans are not linked to any particular project within the LAX Master Plan. Stand-alone plans are divided into five (5) major impact areas: Noise, Air Quality, Biotic Communities, Hydrology and Water Quality, and Environmental Justice. Table 1 below provides a summary status of all "stand-alone" mitigation plans. Brief descriptions of each stand-alone plan are discussed in the following subsections.

Table 1: "Stand-Alone" Mitigation Plans - Summary Status			Completed	In Progress	Existing Policy	Future Plan
6.1	Noise Mitigation Plans					
6.1.A	N-1	Maintenance of Aircraft Noise Abatement Program			X	
6.1.B	MM-N-4	Update the Aircraft Noise Abatement Program				X
6.1.C	MM-N-5	Conduct Part 161 Study		X		
6.1.D	MM-LU-1	Implement Revised Aircraft Noise Mitigation Program		X		
6.1.E	MM-LU-2	Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program		X		
6.1.F	MM-LU-3	Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability for Children to Learn		X		
6.1.G	MM-LU-4	Provide additional sound insulation for schools shown by MM-LU-3 to be significant impacted by aircraft noise				X
6.1.H	MM-LU-5	Upgrade and Expand Noise Monitoring Program		X		
6.2	Air Quality Mitigation Plans					
6.2.A	MM-AQ-1	Mitigation Plan for Air Quality	X			
6.2.B	MM-AQ-2	Construction-Related Mitigation Measures	X			
6.2.C	MM-AQ-3	Transportation-Related Mitigation Measures		X		
6.2.D	MM-AQ-4	Operations-Related Mitigation Measures		X		
6.2.E	AQ-1	Air Quality Source Apportionment Study		X		
6.2.F	AQ-2	School Air Filters				X
6.2.G	AQ-3	Mobile Health Research Lab				X
6.3	Biotic Communities					
6.3.A	MM-ET-1	Riverside Fairy Shrimp Habitat Restoration		X		
6.3.B	MM-BC-8	Replacement of Habitat Units associated with the SAIP		X		
6.3.C	MM-BC-9	Conservation of Faunal Resources associated with the SAIP	X			
6.4	Hydrology and Water Quality					
6.4.A	HWQ-1	Develop Conceptual Drainage Plan	X			
6.6	Environmental Justice					
6.6.A	EJ-1	Aviation Curriculum		X		
6.6.B	EJ-2	Aviation Academy		X		
6.6.C	EJ-3	Job Outreach Center		X		
6.6.D	EJ-4	Community Mitigation Monitoring		X		

6.1 Noise Mitigation Plans

The following subsections describe the status of “stand-alone” noise mitigation plans that relate to existing LAX policies or newly developed programs to reduce noise impacts that may result from airport operations, air traffic dispersion, aircraft departures and other factors (N-1, MM-N-4, MM-N5). Mitigation Measures MM-LU-1 and MM-LU-5 address potential impacts on adjacent residential and other noise-sensitive uses newly exposed to high noise levels or significant increases in existing noise levels. MM-LU-2 addresses potential impacts on residential uses newly exposed to high single event noise levels that result in nighttime awakening that are located outside the current Aircraft Noise Mitigation Program (ANMP) boundaries. MM-LU-3 and MM-LU-4 address classroom disruption due to exposure to high single event or cumulative noise levels.

6.1.A N-1 Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program (ANAP)

The LAX Master Plan MMRP states:

“Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program. All components of the current airport noise abatement program that pertain to aircraft noise will be maintained.”

The existing ANAP at LAX is currently maintained by LAWA’s Noise Management Division (NMD). The existing ANAP at LAX sets forth LAWA’s noise abatement traffic, flight, and runway use procedures. All aircraft operations at LAX must comply with FAA regulations and procedures for noise abatement and noise emission standards and with all rules, policies, procedures, resolutions and ordinances established by the City of Los Angeles, LAWA, and LAWA’s Board of Airport Commissioners relative to noise abatement. LAWA’s NMD will continue to maintain the Noise Abatement Program throughout implementation of the LAX Master Plan projects. Actions indicating compliance include submission of the Quarterly Report per the 2005 Stipulated Variance to the County of Los Angeles. Included in each quarterly report is a short summary of actions indicating compliance with each condition of the variance, including “continuing, in full force and effect, the implementation and enforcement of the...noise abatement policies.”

Status→ Existing Policy:

LAWA has complied with this commitment by continually maintaining the existing Aircraft Noise Abatement Program (ANAP) at LAX.

6.1.B. MM-N-4 Update the Aircraft Noise Abatement Program Elements as applicable to adapt to the future Airfield configuration

The LAX Master Plan MMRP states:

“Update the Aircraft Noise Abatement Program Elements as applicable to adapt to the future Airfield configuration. When existing runways are relocated or reconstructed as part of the Master Plan, the aircraft noise abatement actions

associated with those runways shall be modified and re-established as appropriate to assure continuation of the intent of the existing program.”

Status→ Not required at this time:

No changes to the ANAP were required as a result of the completion in September 2008 of SAIP construction. The existing Preferential Runway Use Policy is still in full force and effect.

6.1.C MM-N-5 Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory

The LAX Master Plan MMRP states:

“Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory. A 14CFR Part 161 Study shall be initiated to seek federal approval of a locally-imposed Noise and Access Restriction on departures to the east during Over-Ocean Operations, or when Westerly Operations remain in effect during the Over-Ocean Operations time period.”

The Part 161 Study is a technical and legal study regarding implementation of a Noise and Access Restriction. The proposed restriction includes departures between the hours of midnight and 6:30 a.m. over the communities to the east of LAX, when LAX is operating under normal weather conditions (when LAX is either in over-ocean operations or remains in westerly operations and excluding times when LAX operates in easterly operations). (49 U.S.C. Section 47521 *et seq.*) The Part 161 Study must meet the relevant requirements of the Airport Noise and Capacity Act of 1990 (ANCA) and the Part 161 regulations (14 C.F.R. Part 161).

Status→ In Progress:

LAWA began the Part 161 Study for LAX in June 2005 and the study was originally expected to take approximately 3 years to complete, but will take about five years. Work on the study was suspended in January 2007, but was resumed upon receipt of new fleet mix forecasts. The Part 161 Study process encompasses three general elements including: (1) data collection and analysis to justify the LAX Proposed Restriction; (2) evaluation and explanation of the legal, environmental and economic impacts of the proposed restriction; and (3) preparation and submittal to the FAA of the required reports and application materials. The Public Outreach Program will resume during the second half of 2009 and continue into 2010. The new scheduled date for submission of the application to the FAA is now at the end of 2009.

6.1.D MM-LU-1 Implement Revised Aircraft Noise Mitigation Program

The LAX Master Plan MMRP states:

“Implement Revised Aircraft Noise Mitigation Program. LAWA shall expand and revise the existing Aircraft Noise Mitigation Program (ANMP) in coordination with affected neighboring jurisdictions, the State, and the FAA. The expanded Program shall mitigate land uses that would be rendered incompatible by noise impacts associated with implementation of the LAX Master Plan, unless such uses are subject to an existing avigation easement and have been provided with noise mitigation funds. LAWA shall accelerate the ANMP's timetable for achieving full

compatibility of all land uses within the existing noise impact area pursuant to the requirements of the California Airport Noise Standards (California Code of Regulations, Title 21, Subchapter 6) and current Noise Variance. With the exception of a possible new interior noise level standard for schools to be established through the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, the relevant performance standard to achieve compatibility for land uses that are incompatible due to aircraft noise (i.e., residences, schools, hospitals and churches) is adequate acoustic performance (sound insulation) to ensure an interior noise level of 45 CNEL or less. As an alternative to sound insulation, incompatible property may also achieve compatibility if the incompatible use is converted to a noise-compatible use.

LAWA shall revise the ANMP to incorporate new, or expand existing measures, including, but not necessarily limited to, the following:

- ◆ *Continued implementation of successful programs to convert existing incompatible land uses to compatible land uses through sound insulation of structures and the acquisition and conversion of incompatible land use to compatible land use.*
- ◆ *Ongoing monitoring and provision of annual updates in support of the requirements of the current LAX Noise Variance pursuant to the California Airport Noise Standards, with the updates made available (upon request) to affected local jurisdictions, the Airport Land Use Commission of Los Angeles County, and other interested parties.*
- ◆ *Continue the current pre- and post-insulation noise monitoring to ensure achievement of interior noise levels at or below 45 CNEL.*
- ◆ *Accelerated rate of land use mitigation to eliminate noise impact areas in the most timely and efficient manner possible through:*
 - *Increased annual funding by LAWA for land use mitigation;*
 - *Reevaluating aviation easements requirements with sound insulation mitigation;*
 - *Provision by LAWA of additional technical assistance, where needed, to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs;*
 - *Reduction or elimination, to the extent feasible, of structural and building code compliance constraints to mitigation of sub-standard housing.*
- ◆ *Revised criteria and procedures for selection and prioritization of properties to be sound insulated or acquired in consideration of the following:*
 - *Insulation or acquisition of properties within the highest CNEL measurement zone;*

- *Acceleration of the fulfillment of existing commitments to owners wishing to participate within the current ANMP boundaries prior to proceeding with newly eligible properties;*
- *Insulation or acquisition of incompatible properties with high concentrations of residents or other noise-sensitive occupants such as those housed in schools or hospitals.*
- ◆ *Amend the ANMP to include libraries as noise-sensitive uses eligible for aircraft noise mitigation.*
- ◆ *Upon completion of the acquisition and/or soundproofing commitment under the current Program, expand the boundaries of the ANMP as necessary over time. LAWA will continue preparing quarterly reports that monitor any expansion of the 65 CNEL noise contours beyond the current ANMP boundaries. Based upon these quarterly reports, LAWA will evaluate and adjust the ANMP boundaries, periodically as appropriate, so that as the 65 CNEL noise contours expand, residential and noise sensitive uses newly impacted by 65 CNEL noise levels would be included within the Program.”*

The Aircraft Noise Mitigation Program (ANMP) describes the ongoing efforts by LAWA to convert existing incompatible land uses surrounding LAX to compatible land uses through the implementation of two noise mitigation strategies: (1) sound insulation of structures; and (2) acquisition of property followed by the conversion of its incompatible land use to compatible land use (land recycling).

LAWA implements the ANMP in an effort to reduce adverse impacts of airport noise and achieve airport standards as set forth in Chapter 6 of Title 21 of the California Code of Regulations. ANMP reports are also specifically required by the State of California as a formal condition of approval of the three-year variances granted by the State to LAWA airports that have not achieved land use compatibility. Based on current data and funding commitments, the ANMP documents the progress made toward achieving land use compatibility and projects the ultimate date when full compatibility will be reached.

Status→ In Progress:

As previously described, LAWA has an existing program in place with periodic updates to the State of California and the County of Los Angeles. The last update was the 2005 ANMP which was submitted in October of 2006. The status of LAWA's existing Aircraft Noise Mitigation Program is also reported in **Appendix C**. In addition, specific updates are as follows:

- ◆ LAWA continues to implement two very successful programs to convert existing incompatible land uses to compatible land uses through sound insulation of structures and the acquisition and conversion of incompatible land use to compatible land use.
- ◆ Annual updates in support of the requirements of the current LAX Noise Variance pursuant to the California Airport Noise Standards are submitted with the second quarterly report, with the updates provided to all affected jurisdictions, and made

available upon request to other interested parties.

- ◆ Pre- and post-insulation noise monitoring audits are regularly conducted to ensure achievement of interior noise levels at or below 45 CNEL.
- ◆ Land use mitigation programs are being implemented as fast as possible given that participation in the program is voluntary.
- ◆ LAWA makes available land use mitigation funds as soon as requested.
- ◆ Avigation easements are no longer required.
- ◆ Under very limited circumstances, as required by California Airport Noise Standards where acoustical treatments alone are insufficient to convert residential land uses to compatible uses with airport operations, noise easements are required for residential sound insulation mitigation.
- ◆ LAWA makes available the resources for timely technical assistance, where needed, to local jurisdictions to support more rapid and efficient implementation of their land use mitigation programs.
- ◆ Selection of and prioritization of properties to be sound insulated or acquired are in consideration of the following:
 - a. Insulation or acquisition of properties within the highest CNEL measurement zone.
 - b. Acceleration of the fulfillment of existing commitments to owners wishing to participate within the current ANMP boundaries prior to proceeding with newly eligible properties.

6.1.E MM-LU-2 Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program

The LAX Master Plan MMRP states:

“Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program. *In addition to any restrictive measures that may be implemented resulting from completion of Mitigation Measure MM-N-5, Conduct Part 161 Study to Make Over-Ocean Departure Procedures Mandatory, the boundaries of the ANMP will be expanded to include residential uses newly exposed to single event exterior nighttime noise levels of 94 dBA SEL, based on the Master Plan alternative that is ultimately approved and periodic reevaluation and adjustments by LAWA. Uses that are newly exposed would be identified based on annual average conditions as derived from the most current monitored data.”*

Status→ In Progress:

A methodology to produce single event noise contours for a given calendar year was developed in October 2006. However, as a result of the recent completion of construction on the south airfield complex, the first year of normal operations will be in 2009 and the single event contours will then be produced within the first quarter of

2010. Contours will then be updated annually and will be incorporated into a database. Once LAWA receives the number and the exact location of the affected properties, the current program will then be reevaluated and amended accordingly. Annual ANMP progress reports and periodic ANMP report updates will be submitted to the County of Los Angeles.

6.1.F MM-LU-3 Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn

The LAX Master Plan MMRP states:

“Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn. *Current Studies of aircraft noise and the ability of children to learn have not resulted in the development of a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Therefore a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for classroom disruption by both specific and sustained aircraft noise events.”*

Status→ In Progress:

LAWA has developed a draft scope of services and continues to consult with noise and other academic experts to assess the feasibility of the study.

6.1.G MM-LU-4 Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise.

The LAX Master Plan MMRP states:

“Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. *Prior to completion of the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and within six months of the commissioning of any relocated runways associated with implementation of the LAX Master Plan, LAWA shall conduct interior noise measurements at schools that could be newly exposed to noise levels that exceed the interim LAX interior noise thresholds for classroom disruption of 55 dB Lmax, 65 dB Lmax, or 35 Leq(h), as presented in Section 4.1 Noise, of the Final EIS/EIR. All school classroom buildings (except those within schools subject to an avigation easement) that are found through the noise measurements to exceed the interim interior noise thresholds, as compared to the 1996 baseline conditions presented in the Final EIS/EIR, would become eligible for soundproofing under the ANMP.*

Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established threshold of significance for classroom disruption based on comparison with 1996 baseline conditions due to implementation of the LAX Master Plan, shall be eligible for participation in the ANMP administered by LAWA, unless they are subject to an existing avigation easement. A determination of which

schools become eligible will be made following application of the new threshold based on measured data.”

Status→ Not required at this time:

LAWA will implement this measure’s requirements contingent on the results from the study required by MM-LU-3.

6.1.H MM-LU-5 Upgrade and Expand Noise Monitoring Program

The LAX Master Plan MMRP states:

“Upgrade and Expand Noise Monitoring Program. *LAWA shall upgrade and expand its existing noise monitoring program in surrounding communities through new system procurement, noise monitor location, and equipment installation. Permanent or portable monitors shall be located in surrounding communities to record noise data 24 hours per day, seven days per week for correlation with FAA radar data to cross-reference noise episodes with flight patterns. The upgraded system will support LAWA and other jurisdictional ANMP’s when considering adjustments to airport noise mitigation boundaries.”*

Status→ In Progress:

On April 18, 2005, LAWA issued a contract to upgrade and expand the Aircraft and Noise Monitoring and Management System (ANMMS) for LAWA at LAX, ONT, and VNY. LAWA entered into a contract with Lochar Corporation in July 1995 to install the latest software called the Aircraft Noise and Operations Monitoring System (ANOMS) version 8x. The software is currently going through acceptance testing. The Site Acceptance Testing (SAT) was complete in October 2008, and five out of the 55 tests failed. Therefore, additional work is needed prior to commencing the next phase of testing; the 30-day Reliability Testing. The system is expected to be fully operational in the first quarter of 2009. Additional development will still be ongoing with new functionality, web application, and noise monitoring devices being installed beyond this date. However, LAWA expects to gain the required certification of the system from CalTrans in the first quarter of 2009, as all required system functions should be in place at that time.

As part of the new system design, LAWA is replacing all of the actual noise monitoring equipment located throughout the communities impacted by LAX operations. Currently, LAWA reports on the noise levels at LAX using 25 noise monitors. LAWA is installing many new permanent noise monitors to better represent the actual noise levels in different areas, including areas well outside of the current 65 dB CNEL Noise Impact Area. This work is approximately 90% complete, with 30 monitors up and running of the 39 total planned for installation. These monitors are all permanent sites, and will be collecting data continuously. Data from each site is downloaded nightly into the ANOMS system, and processed with the flight data to determine the noise levels associated with airport operations. The data is then used to calculate the annual noise levels represented in the State-required Quarterly Reports.

Full acceptance of the system, including new design components: all hardware, software, web applications, and reporting capabilities are expected to be complete in 2009.

6.2 Mitigation Plans for Air Quality

The following subsections describe the status of “stand-alone” air quality mitigation plans that serve to reduce air quality impacts associated with implementation the LAX Master Plan. While the LAX Master Plan FEIR identifies the general function, purpose, and orientation of various air quality mitigation measures, the following mitigation plans provide specifics regarding the design and implementation of those measures.

6.2.A MM-AQ-1 LAX Master Plan –Mitigation Plan for Air Quality (Framework)

The LAX Master Plan MMRP states, in part:

"LAX Master Plan - Mitigation Plan for Air Quality - LAWA shall expand and revise the existing air quality mitigation programs at LAX through the development of an LAX Master Plan –Mitigation Plan for Air Quality (LAX MP-MPAQ)."

Status→ Completed:

In 2005, LAWA completed a Mitigation Plan for Air Quality that established the overall framework for the implementation of specific measures for mitigating air quality impacts associated with the LAX Master Plan. The MM-AQ-1 Plan was adopted by the Board of Airport Commissioners in December 2005, in conjunction with approval of the SAIP (i.e., prior to implementation of the first project under the LAX Master Plan).

6.2.B MM-AQ-2 Construction-Related Mitigation Measures

The LAX Master Plan MMRP states, in part:

"Construction-Related Mitigation Measures - The required components of the construction-related air quality mitigation measures are itemized below [starting on page 4-725 of the FEIR]. These components include numerous specific actions to reduce emissions from on-road and non-road mobile sources and stationary engines. All of these measures must be in place prior to commencement of the first Master Plan construction project and must remain in place through build out of the Master Plan. An implementation plan will be developed which provides available details as to how each of the elements of this construction-related mitigation measures will be implemented and monitored."

Status→ Completed:

LAWA completed a Construction-Related Mitigation Plan that set forth specific implementation requirements for the measures referenced in the FEIR. The MM-AQ-2 Plan was adopted by the Board of Airport Commissioners in December 2005, in conjunction with approval of the SAIP (i.e., prior to implementation of the first project under the LAX Master Plan) and have been integrated into the SAIP construction specifications as appropriate. The execution of this implementation plan (i.e., the MM-AQ-2 Plan) will occur in conjunction with construction of each Master Plan project.

6.2.C MM-AQ-3 Transportation-Related Mitigation Measures

The LAX Master Plan MMRP states, in part:

"Transportation-Related Mitigation Measure - The primary feature of the transportation-related air quality mitigation measure is the development and construction of at least eight (8) additional sites with Flyaway service similar to the service provided by the Van Nuys Flyaway currently operated by LAWA. The intent of these FlyAway sites is to reduce the quantity of traffic going to and from LAX by providing regional locations where LAX employees and passengers can pick up an LAX-dedicated, clean-fueled bus that will transport them from a FlyAway closer to their home or office into LAX and back."

Status→ In Progress:

LAWA operates three FlyAway routes from Van Nuys, Union Station and Westwood. The Westwood link, now in its second year, continues to show growth, and is meeting forecast expectations. Union Station also continued to grow in 2008. The Van Nuys route, in operation since 1975, has averaged over 950,000 passengers over the past several years, and is considered near maturity under present conditions such as aviation demand, the price of fuel, and I-405 freeway traffic capacity and demand.

Collectively in 2008, the FlyAway network realized an annual ridership of 1.55 million passengers, reduced 10,018.3 tons of emissions, saved 26.2 million vehicle miles, and removed 3,600 daily vehicle trips from the regional roads and LAX. LAWA continues to identify and evaluate future development sites throughout the greater Los Angeles area. LAWA is committed to implementing an additional six FlyAway sites by 2015.

Below is a summary of the CY 2007 and CY 2008 data for LAX FlyAways emissions, miles saved and travel expense savings by users:

Van Nuys	CY 2007⁽¹⁾	CY 2008
Ridership	946,018	987,705
Vehicle Trips Saved	804,060 (2,203/day)	839,491 (2,300/day)
Reduction in Vehicle Miles Traveled	16.9 million miles	17.6 million miles
Emissions reduced ⁽³⁾	7,073.2 tons	7,400.6 tons
Auto operating cost savings	\$9.5 million	\$11.0 million
Union Station		
	CY 2007	CY 2008
Ridership	329,323	433,216
Vehicle Trips Saved	279,905 (767/day)	368,208 (1,009/day)
Reduction in Vehicle Miles Traveled	5.5 million miles	7.3 million miles
Emissions reduced ⁽³⁾	1,674.1 tons	2,549.8 tons
Auto operating cost savings	\$3.1 million	\$4.5 million

Westwood	CY 2007⁽²⁾	CY 2008
Ridership	98,274	125,288
Vehicle Trips Saved	83,527 (229/day)	106,487 (292/day)
Reduction in Vehicle Miles Traveled	1.0 million miles	1.3 million miles
Emissions reduced ⁽³⁾	(72.2) tons	67.7 tons
Auto operating cost savings	\$563,000	\$796,000

⁽¹⁾ The 2007 emissions data reported at the beginning of 2007 may differ from this report, due to changes in the calculating methodology.

⁽²⁾ Westwood service started in June 2007; annualized numbers for 2007 are estimates based on first six months.

⁽³⁾ Emissions reported include NOX, CO, ROG, PM10 and CO2.

The LAX Master Plan MMRP states, in part:

"Transportation-Related Mitigation Measure – Other feasible mitigation elements may be developed to ensure that the emission reductions for this transportation-related measure are achieved. These may include, for example... Clean Vehicle Fleets measures such as:

- *Promoting commercial vehicles/trucks/vans using terminal areas (LAX and regional intermodal) to install SULEZ/ZEV engines to reduce vehicle air emissions.*

Status→ In Progress:

Currently, over 72% of LAWA's fleet vehicles and equipment at LAX are Alternative Fuel Vehicles (AFV). Fleet includes over 550 AFVs. Additionally, 100% of the LAX courtesy shuttle fleet is powered by natural gas. LAWA has designed and built a state-of-the-art, high-technology LNG/LCNG fueling station at LAX and acquired over \$3 million in grant funding to offset the differential cost of AFVs. LAWA has partnered with the Department of Water and Power to install 32 public access electric vehicle charging stations at LAX and partnered with Praxair, BP, SCAQMD, California Energy Commission, and the U.S. DOE to build the first retail hydrogen fueling station at an airport.

The AFV program has been recognized as one of the most successful airport AFV programs in the nation and a world-class model for airports and other agencies. Awards and recognition include:

- Clean Air Awards from the Coalition for Clean Air and South Coast Air Quality Management District
- Certificate of Distinguished Achievement from the California Natural Gas Vehicle Coalition
- Clean Cities Certificate for participation in the U.S. Department of Energy's Clean Cities Program.
- Recognized by the U.S. Department of Energy Clean Cities Program as a "success story for airports"

6.2.D MM-AQ-4 Operations-Related Mitigation Measures

The LAX Master Plan MMRP states in part:

"Operations-Related Mitigation Measure: *The primary component of the operations-related air quality mitigation measure consists of one airside item, the conversion of ground support equipment (GSE) to extremely low emission technology (such as electric power, fuel cells, or other future technological developments)."*

Status→ In Progress:

LAWA is continuing to evaluate the goals of MM-AQ-4 and investigate available technology and potential technological developments regarding extremely low emission GSE. LAWA is in the process of finalizing a GSE conversion policy which will ultimately be included in the Air Carrier Operating Permits (ACOPs). LAWA is currently preparing to meet with the stakeholders prior to the policy's inclusion in the ACOPs.

6.2.E AQ-1 Air Quality Source Apportionment Study

The LAX Master Plan MMRP states in part:

"Air Quality Source Apportionment Study. *LAWA will conduct an air quality source apportionment study to evaluate the contribution of on-airport aircraft emissions to off-airport air pollutant concentrations."*

Status→ In Progress:

LAWA commenced an Air Quality and Source Apportionment Study (AQSAS) to assess air quality in areas adjacent to LAX. This AQSAS will be the most comprehensive air monitoring, modeling, and data analysis program to be undertaken by LAWA for one of its facilities, or for that fact, by any airport authority nationwide.

This study will include the installation -monitoring stations in selected areas to discreetly collect and measure a large variety of both criteria and toxic air pollutants on site at LAX and at sites in the communities surrounding LAX. This study is planned to be conducted in three phases. The first phase commenced in March 2008. The second phase included a Technology and Methodology Feasibility Demonstration Project (Demonstration Project) where data was collected continuously at five on-airport sites during June, July, and August, 2008 to assess the feasibility of the approach and methodology for Phase III. The results of the Demonstration Project will be used to validate the scientific approach of the long-term study. Criteria pollutants to be measured include nitrogen dioxide, carbon monoxide, particulate matter, and sulfur dioxide. Toxic air pollutants to be measured include many species of volatile organic compounds, semi-volatile organic compounds, trace metals, and other inorganic compounds.

The Study's scope or Work Plan was developed by a Technical Working Group (TWG) that is comprised of representatives from U.S. Environmental Protection Agency (EPA), Federal Aviation Administration (FAA), California Air Resources Board, South Coast Air Quality Management District, State of California Office of Environmental Health Hazard Assessment, Desert Research Institute, University

of Southern California, research experts in the fields of receptor modeling and air pollutant monitoring, and representatives from community organizations.

The TWG recently determined that in order to assess viability of the third phase of the study, additional analysis of the data collected during the Demonstration Project needs to be done before a detailed work scope for Phase III can be formulated. It is anticipated that Phase III would be initiated in 2010. The TWG will continue to participate on this study by reviewing all stages of the AQSAS to ensure that the study follows reliable methods to produce useful results.

Several meetings were held in 2008 to communicate the status, progress and results of the study to a larger Briefing Group consisting of a diverse panel of environmental and public health regulatory agencies, as well as Federal, State and Local elected officials. LAWA will continue to hold these Briefings during the long-term study. LAWA will also initiate and schedule public meetings at appropriate points throughout the long-term study.

In September 2008, a website was created to make project information available to the public. The website includes background information on the study, the schedule and photographs of the Demonstration Project, and handout materials and presentations. The website will continue to be updated as project information becomes available. The website address is:

<http://www.lawa.org/welcomeLAX.cfm?id=1066>

The website can also be reached by going to <http://www.lawa.org>, About LAWA, Environment, LAX, LAX Air Quality and Source Apportionment Study.

6.2.F AQ-2 School Air Filters

The LAX Master Plan MMRP states:

"School Air Filters. LAWA will provide funding for air filtration system at qualifying public schools with air conditioning systems in place. The qualifying schools will be determined based upon review of the conclusions and recommendations of the Air Quality Source Apportionment Study to be conducted in Master Plan Commitment AQ-1."

Status→ Not required at this time:

LAWA will initiate the process of identifying qualifying schools following completion of AQ-1, Air Quality Source Apportionment Study.

6.2.G AQ-3 Mobile Health Research Lab

The LAX Master Plan MMRP states:

"Mobile Health Research Lab. LAWA will explore the ability to fund/co-fund, to the extent feasible and permissible by federal and local regulations, or seek funding sources to support the goal of a Mobile Health Research Lab. The goal of the Mobile Health Research Lab will be to research and study, not diagnose or treat, upper respiratory and hearing impacts that may be directly related to the operation of LAX."

Status→ Not required at this time:

LAWA will initiate this study following the completion of AQ-1, Air Quality Source Apportionment Study and availability of funds.

6.3 Biotic Communities Mitigation Plans**6.3.A MM-ET-1 Riverside Fairy Shrimp Habitat Restoration**

The LAX Master Plan MMRP states in part:

“Riverside Fairy Shrimp Habitat Restoration. LAWA or its designee shall undertake mitigation for direct impacts to 0.04 acre (1,853 square feet) of degraded wetland habitat containing embedded cysts of Riverside fairy shrimp and potential indirect impacts to 1.26 acres of degraded wetland habitat containing embedded cysts of the Riverside fairy shrimp.”

Status→ In-Progress:

On April 20, 2004, the United States Fish and Wildlife Service (USFWS) issued a Biological Opinion (BO) based on their review of Alternative D of the Draft EIS/EIR for LAWA Master Plan for LAX and its effects on the federally endangered Riverside Fairy Shrimp (*Streptocephalus woottoni*, “RFS”) in accordance with Section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.). The April 20, 2004 BO proposed several conservation measures (i.e. mitigation requirements) to offset direct and indirect impacts on the RFS. Subsequently, on April 8 2005, the USFWS issued a BO based on their review of the proposed operations and maintenance activities for LAX and its effects on the RFS. Details of all of the conservation measures are described in both BOs.

LAWA’s Riverside Fairy Shrimp Habitat Restoration, identified as Mitigation Measure MM-ET-1 in the LAX Master Plan MMRP, is consistent with the BOs from the USFWS. This mitigation measure involves the creation of a RFS habitat at El Toro or at a comparable site approved by the USFWS. LAWA is currently investigating a comparable site at Madrona Marsh in Torrance, California. To date, LAWA’s mitigation activities include the following as it pertains to MM-ET-1:

Completion of the salvage and storage of RFS cyst-bearing soils at LAX in support of the April 20, 2004, BO for Alternative D and the April 8, 2005 BO for Operations and Maintenance. Conservation Measures 5 and 9 of the April 20, 2004 BO and Conservation Measure 8 of the April 8, 2005 BO identify the methods of salvage and storage of RFS cyst-bearing soils located at LAX.

On July 13, 2005 through August 8, 2005, LAWA salvaged and stored approximately 1800 cubic feet of RFS cyst-bearing soils formerly located at LAX SAIP site. The RFS cyst-bearing soils collected are being stored in a climate-controlled facility near LAX. The facility is secured and monitored by video cameras 24 hours a day. Carlsbad Fish and Wild Life Office inspected and approved the RFS-cyst storage facilities on August 2, 2005. On December 2, 2005, the FAA transmitted a letter confirming the completion of the RFS cysts conservation work to the United States Fish & Wildlife Services.

LAWA continues to negotiate with the City of Torrance (COT) for use of Madrona Marsh for RFS Habitat Restoration activities. Also, LAWA and the FAA are pursuing alternate plans to create a RFS habitat on Federal lands located at the former Marine Corps Air Station El Toro. In August 2006, the proposed RFS habitat creation site was the subject of discussions between the FAA and the FBI regarding the future compatibility of the site between FBI training and creation of a RFS habitat. LAWA continues to coordinate with the FAA in support of these efforts.

After further investigation, in May 2008, it was determined that the El Toro site does not have suitable soil for developing RFS habitat. With the concurrence of the USF&WS, FAA and LAWA, all mitigation for the RFS cysts will occur at the Madrona Marsh location. The USF&WS is coordinating this effort directly with the COT. The final agreement will be sent to LAWA for review and final adoption.

6.3.B MM-BC-8 Replacement of Habitat Units Associated with the SAIP (Disturbed/Bare Ground and Non-Native Grassland/Ruderal Areas)

The SAIP MMRP states in part:

“Replacement of Habitat Units Associated with the South Airfield Improvement Project. LAWA or its designee shall undertake mitigation for the loss of 17.2 habitat units resulting from implementation of the SAIP. These habitat units shall be replaced at a 1:1 ratio within the FAA-owned habitat preserve at the former Marine Corps Air Station El Toro (El Toro site), or other appropriate site.”

Status→ In Progress:

On August 6, 2007, the BOAC approved an MOU between LAWA and the Palos Verdes Peninsula Land Conservancy (PVPLC) for the development of 21 acres of coastal sage/needle grass habitat units in complete fulfillment of LAWA's MM-BC-8 commitment. This mitigation plan was approved by both the U.S. Fish & Wildlife Service and the California Department of Fish & Game. The new location near the coast, unlike the previously proposed location at El Toro, is better suited as a replacement site. LAWA funded PVPLC in the amount of \$610,938 for this conservation work to be performed over a three year period. Each year, PVPLC will provide an annual progress report documenting the result of their effort.

In November 2008, the first year of the 3 years mitigation was completed. PVPLC selected the “3 Sisters Reserve Habitat” as the restoration site. A site restoration plan, containing proposed plant selection and the specifics of the restoration work, was submitted to LAWA's for review and approval. On November 20, 2008, LAWA staff inspected the “3 Sisters Reserve Habitat” and approved the site selection. Field work will begin in 2009 and will be coordinated with the annual rain.

6.3.C MM-BC-9 Conservation of Faunal Resources Associated with the SAIP
(San Diego black-tailed jackrabbit and the loggerhead shrike)

The SAIP MMRP states in part:

“Conservation of Faunal Resources Associated with the South Airfield Improvement Project. *Directed surveys for the San Diego black-tailed jackrabbit and the loggerhead shrike shall be undertaken by a qualified wildlife biologist at least 14 days before construction activities. LAWA or its designee shall relocate any observed San Diego black-tailed jackrabbit individuals currently inhabiting the SAIP project areas. Relocation efforts shall be coordinated with CDFG.”*

Status→ Completed:

LAWA contracted with a qualified wildlife biologist who conducted surveys to comply with this measure in 2005 prior to the start of the SAIP construction. Reference the 2005 MMRP annual report for documentation of the survey. Relocation efforts are not required.

6.4 Environmental Justice

LAWA has worked with local and contracting communities to develop programs that address the current and projected demands for qualified employees and contractors. Some of these programs are:

6.4.A EJ-1 Aviation Curriculum

The LAX Master Plan MMRP states in part:

“Aviation Curriculum: *LAWA will work with local school districts to offer aviation-related curriculum at elementary schools, middle schools, high schools and colleges in affected communities near the Los Angeles International Airport. Potential pilot schools could include: Beulah Payne Elementary School, Lennox Middle School, Hillcrest Continuation School, Inglewood High School, Morningside High School, and Los Angeles Southwest College.”*

Status→ In Progress:

LAWA is continually coordinating with the local school districts in developing aviation-related curriculum.

6.4.B EJ-2 Aviation Academy.

The LAX Master Plan MMRP states in part:

“Aviation Academy: *LAWA will work with local school districts to provide comprehensive educational and trade training for aviation-related careers, targeting students in the affected communities to provide them with increased career opportunities.”*

Status→ In Progress:

The Aviation Career Education (ACE) Academy is a free week-long motivational program to provide students with a basic understanding of career opportunities within the aviation industry, as well as a general knowledge about LAX. This

program is open to all Los Angeles area seventh-and eighth-grade students (between the ages of 12 and 14) and high school students (between the ages of 15 and 18) in communities surrounding LAX, including El Segundo, Hawthorne, Inglewood, Lennox, South Los Angeles, and Westchester/Playa del Rey. Annually, 75 local students participate in the program. Program participants attend site visits and presentations by organizations such as the FAA, Boeing Aircraft, Federal Drug Enforcement Agency, Airlines, LSG Sky Chefs, and others.

The Gateways Internship Program was launched by LAWA as a collaborative initiative of the Inglewood Unified School District, South Bay Private Industry Council and the Los Angeles World Airports. The program was developed as one of several approaches to address the current and projected demand for qualified employees to fill positions at LAWA. This program provides paid internships to local youth currently attending high school or college. The program has been expanded to include the Los Angeles Unified School District, Centinela Valley High School District and the El Segundo Unified School District. The program consists of a high school and a college internship component. The goal of the program is to expose local high school and college students to career opportunities in the aviation industry. This is accomplished by providing on-the-job practical experience in the aviation field through education, training and mentoring programs and activities.

AIRCademics, "Passport to Art Program" is comprised of a 30-week curriculum offered at the Westchester YMCA, near LAX. This school-to-career enrichment program focuses on teaching the subjects of science, math, reasoning and aviation through the completion of art projects. Participants, who are of middle school age, also learn about the history of flight while attending lectures and field trips. The final class project is the creation of a comic book about LAX. Delivery of this program has been provided to 15 participants this year.

"Wings to Fly" Mentoring Program connects positive adult role models, in this case airport employees, with at-risk youth in local high schools. Over a seven-month period, students come to LAX twice a month for professionally facilitated workshops, guest speakers and one-on-one time with their mentors, and learn about airport opportunities in a fun atmosphere. This program has been provided to 36 participants.

LAWA selected Loyola Village School in Westchester to participate in the 2008 Adopt-A-School program. The program included 110 students who were exposed to various areas of aviation education. The students were offered presentations, tours and behind the scenes visits to observe aviation careers.

LAWA is continually coordinating with local school districts to provide education and trade training programs for aviation-related careers. Positive feedback was received from participants surveyed in these LAX education outreach programs.

6.4.C EJ-3 Job Outreach Center

The LAX Master Plan MMRP states in part:

"Construction and Other LAX-Related Job Outreach - LAWA will create or utilize an existing resource center to assist historically underrepresented and at-

risk local residents to find surrounding airport-related businesses through training and comprehensive outreach.”

Status→ In Progress:

Within Fiscal Year 2007-2008 the BJRC has made huge strides to assist residents of the local community. LAWA has attended over 65 job fairs and spoke at numerous career days on elementary and high school campuses. The Gateways Internship Program is in full swing and employed 25 local high school students for the summer. There are 25 college students currently working with both LAWA divisions and LAWA employers at LAX, Van Nuys and Ontario Airports.

Although not yet approved by the FAA, the Job Training Program (JTP) has been able to leverage LAWA's strong community ties with the Community College system and surrounding universities to create training classes for LAWA Division staff and LAWA employers, at no cost to LAWA. JTP continues to refer qualified applicants to the LAX Century Community Training Program for pre-apprenticeship training which provides specialized instruction in a number of construction trades.

The First Source Hiring Program (FSHP) recently completed a survey of LAWA employers and Work Source Centers to ascertain the future employment needs LAWA employers. A comprehensive report detailing the survey findings will be released shortly.

Another RFP was released to Assess, Filter, Refer and Track candidates for employment. LAWA has selected a contractor pending final administrative review who will develop a technological interface for job seekers and employers that will streamline the hiring process.

The First Source Hiring Program has been working closely with both the Work Source and One-Stop Centers that serve the airport area and beyond. LAWA also participates in the Mayor's South Los Angeles Initiative to hire those residents that experience disproportionate levels of poverty and unemployment compared to the general population. Many of these residents live in the designated Project Impact Area.

The Hire Inglewood Program Office opened at Inglewood City Hall on January 23, 2008. Initially open only on Monday and Wednesday, days of operation now include the alternate Fridays that coincide with the City of Inglewood calendar. The HIP Office provides employment outreach services comparable to the BJRC main office location. Because of its accessible location, friendly staff, and word of mouth referrals, foot traffic has been on the increase. LAWA will be implementing a media blitz in conjunction with the City of Inglewood to increase awareness of the HIP Office in the coming year.

The General Manager of the newly opened World Way West Grill at LAX was hired as a result of his visit to the HIP Office.

6.4.D EJ-4 Community Mitigation Monitoring

The LAX Master Plan MMRP states in part:

“Community Mitigation Monitoring: *LAWA will include community participation in monitoring the implementation of the final Mitigation Measures and Master Plan Commitments in order to ensure agency compliance and accountability. The community participation will include a diverse group of residents, stakeholders, environmental specialists and community leaders that will convene on a regular basis.”*

Status→ In Progress:

The LAX Master Plan Stakeholders Liaison Office (LAX MP SLO) was created as a component of the LAX Plan and the LAX Specific Plan by the Los Angeles City Council to ensure public participation in the implementation of the LAX Master Plan. The LAX MP SLO provides stakeholders with direct access to applicable information on the LAX Master Plan. In addition, LAWA is working with parties to the Stipulated Settlement agreed upon by the City of El Segundo, City of Inglewood, City of Culver City, County of Los Angeles, and Alliance for a Regional Solution to Airport Congestion and LAWA in February 2006, and is working in partnership with the LAX Coalition for Economic, Environmental and Educational Justice (LAX Coalition), which includes community groups, environmental organizations and labor unions, to develop a program to ensure that communities impacted by the LAX Master Plan Program also receive benefits as a result of the implementation of the Program.

LAWA is continually working with the Stakeholders Liaison Office, parties to the Stipulated Settlement, and the LAX Coalition to encourage community participation in the development of the LAX Master Plan.

7.0 Additional Mitigation Updates

7.1 Hydrology and Water Quality

7.1.A MM-HWQ-1 Update Regional Drainage Facilities

The LAX Master Plan MMRP states in part:

“Regional drainage facilities should be upgraded, as necessary, in order to accommodate current and projected future flows within the watershed of each stormwater outfall resulting from cumulative development. This could include upgrading the existing outfalls, or building new ones. The responsibility for implementing this mitigation measure lies with the Los Angeles County Department of Public Works and/or the City of Los Angeles Department of Public Works, Bureau of Engineering. A portion of the increased costs for the upgraded flood control and drainage facilities would be paid by LAX tenants and users in accordance with the possessory interest tax laws and other legal assessments, consistent with federal airport revenue diversion laws and regulations and in compliance with state, county and city laws. The new or upgraded facilities

should be designed in accordance with the drainage design standards of each agency.”

Status→ In Progress:

LAWA completed a Conceptual Drainage Plan which was adopted in conjunction with the SAIP. To determine if regional drainage facilities should be upgraded, LAWA is performing an analysis to evaluate the post-construction drainage conditions for ongoing and future projects.

7.2 Energy Supply and Light Emissions

7.2.A E-1 Energy Conservation and Efficiency Program

The LAX Master Plan MMRP states in part:

“LAWA will seek to continually improve the energy efficiency of building design and layouts during the implementation of the LAX Master Plan. Title 24, Part 6, Article 2 of the California Administrative Code establishes maximum energy consumption levels for heating and cooling of new buildings to assure that energy conservation is incorporated into the design of new buildings.”

7.2.B L1-2 Use of Non-Glare Generating Building Materials

The LAX Master Plan MMRP states in part:

“Prior to approval of final plans, LAWA will ensure that proposed LAX facilities will be constructed to maximize use of non-reflective materials and minimize use of undifferentiated expanses of glass.”

7.2.C L1-3 Lighting Controls

The LAX Master Plan MMRP states in part:

“Prior to final approval of plans for new lighting, LAWA will conduct reviews of lighting type and placement to ensure that lighting will not interfere with aeronautical lights or otherwise impair Airport Traffic Control Tower or pilot operations.”

Status→ In Progress:

LAWA is committed to integrating sustainable practices in the areas of Sustainable Design, Energy and Atmosphere, Materials and Resources, Water Efficiency, Transportation Resources, and Administrative Processes into operations and administrative processes throughout our organization.

Reference exhibit **Appendix E** for the LAWA’s Airport Sustainable Planning, Design and Construction Guidelines

7.3 Solid Waste

7.3.A SW-1 Implement an Enhanced Recycling Program

The LAX Master Plan MMRP states in part:

“LAWA will enhance their existing recycling program, based on successful programs at other airports and similar facilities.”

Status→ In Progress:

LAWA’s Construction and Maintenance Services Recycling and Source Reduction Program achieved a 65.1% recycling rate at LAX for calendar year 2007. This achievement exceeds the previous year’s rate by 1%. With this accomplishment, LAWA continues on the path towards meeting the Mayor’s goal of 70% recycling by 2015.

Other notable achievements for the Recycling and Source Reduction Program include the following:

- Increased wood pallet recycling by 42%.
- Increased mixed paper recycling by 31%.
- Expanded our partnership with the TSA to include recycling of items discarded at terminal checkpoints.
- Expanded can and bottle recycling collection in passenger areas with the addition of airport amenity units in each terminal.
- Added an informational page about recycling on LAWA’s intranet.

LAWA’s goals for 2008 included expansion of our beverage container and newspaper recycling program at TBIT (provided that additional resources are allocated), providing logistical and technical support to airlines implementing in-flight recycling programs, and partnering with the Bureau of Sanitation to compost pre-consumer food wastes collected from airline catering kitchens.

7.4 Construction Impacts

7.4.A C-1 Establishment of a Ground Transportation/Construction Coordination Office

The LAX Master Plan MMRP states in part:

“Establish this office for the life of the construction projects to coordinate deliveries, monitor traffic conditions, advise motorists and those making deliveries about detours and congested areas, and monitor and enforce delivery times and routes.”

Status→ In Progress:

This measure was included in SAIP contract specifications and will be included in all ongoing and future contract specifications.

7.4.B C-2 Construction Personnel Airport Orientation

The LAX Master Plan MMRP states in part:

“All construction personnel will be required to attend an airport project-specific orientation (pre-construction meeting) that includes where to park, where staging areas are located, construction policies, etc.”

Status→ In Progress:

This was included in SAIP contract specifications and will be included in all ongoing and future contract specifications.

7.5 Design, Art, and Architecture Applications/Aesthetics

7.5.A DA-2 Update and Integrate Design Plans and Guidelines

The LAX Master Plan MMRP states in part:

“The following plans and guidelines will be individually updated or integrated into a comprehensive set of design-related guidelines and plans; LAX Street Frontage and Landscape Development Plan (June 1994), LAX Air Cargo Facilities Development Guidelines (April 1998; updated August 2002), and LAX Northside Design Plan and Development Guidelines (1989), including conditions addressing heights, setbacks and landscaping.”

Status→ In Progress:

In addition to updating the above referenced plans, LAWA has developed and commenced implementing a comprehensive Airport Sustainable Planning, Design and Construction Guidelines that apply to all LAWA projects, not only LAX Master Plan-related. Implementation of these guidelines will meet green building specifications, and improve the use of recycling, alternative fuel sources, recycled water, water conservation, reduce energy requirements, and reduce the airport's overall Greenhouse Gas emissions.

7.6 Water Use

7.6.A W-2 Water Conservation

The LAX Master Plan MMRP states in part:

“LAWA will enhance the existing Street Frontage and Landscape Plan for LAX to ensure the ongoing use of water conservation practices at LAX facilities. The intent of this program, to minimize the potential for increased water use due to implementation of the LAX Master Plan program, is also 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.”

Status→ In Progress:

Currently, 35% of all landscaped areas at LAX are irrigated by reclaimed water. The number of landscaped areas served is limited to those areas accessible to the reclaimed water supply pipeline. Approximately 40.2 million gallons or 123 acre-feet of water is conserved each year through the use of reclaimed water. Additionally, much of the irrigation system at LAX is monitored and controlled through a centralized computer irrigation control center. This system further conserves valuable water resources.

Buildings and passenger terminals at LAX feature low-flow devices on all toilets and sinks, with phone numbers prominently posted in all restrooms so people can notify maintenance staff if they encounter leaky faucets or other water problems. In addition, water used in on-airport car wash facilities is recycled.

LAWA is also working with DWP to determine the feasibility of bringing reclaimed water into the Central Terminal Area for use in the Central Utilities Plant cooling tower. The DWP estimates that this will reduce LAX's water usage by approximately 90 acre/ft per year.

8.0 Awards and Achievements

8.1 Alternative Fuels

LAWA's Alternative Fuels Program began in 1993. The program is based on our commitment to take a leadership role in clean air efforts through the use of vehicles and equipment powered by alternative fuels. Alternative fuels are defined as zero to low-emission fuels, other than traditional fossil fuels such as gasoline and diesel.

Alternative fuels currently in use by LAWA include:

- Liquefied natural gas (LNG)
- Compressed natural gas (CNG)
- Electricity
- Solar electricity
- Propane
- Hydrogen

Additionally, LAWA is purchasing ethanol (E-85) and hybrid-electric powered vehicles.

Policy

In April 1999, by Resolution 20609, the Board of Airport Commissioners formally adopted the Los Angeles World Airports Alternative Fuels Vehicle Program. Recognizing the environmental benefits to be derived from alternative fuel

vehicles, this policy states in part that “Los Angeles World Airports is committed to identifying and replacing existing fossil fuel vehicles and equipment with alternative fuel vehicles and equipment, including vehicles powered by compressed natural gas, liquefied natural gas, electricity, and other clean burning alternative fuels.”

Program Elements

- Replace existing fossil fuel powered vehicles and equipment with alternative fuel vehicles (AFVs) whenever possible during the scheduled vehicle and equipment replacement program.
- Investigate the cleanest fuels available for all applications.
- Develop and maintain fueling infrastructure with the goal of minimizing fuel cost and maximizing the use of AFVs in the fleet.
- Continue the research, training, and communication necessary to insure a successful program and serve as a resource for companies and other agencies interested in understanding the principles and benefits of using alternative fuels.

Current Fleet at LAX

- 50 LNG buses and trucks
- 223 CNG sedans
- 158 CNG light trucks
- 64 CNG street sweepers, medium/heavy duty trucks, buses
- 33 Propane trucks, forklifts
- 17 electric trucks, forklifts, man-lifts
- 20 hybrid gasoline-electric sedans and trucks
- 11 solar powered changeable message signs
- 5 hydrogen sedans

Total: 581 units, or 73% of fleet

Accomplishments

- Over 73% of LAWA's fleet vehicles and equipment at LAX are AFVs. Fleet includes over 550 AFVs.
- 100 % of the LAX courtesy shuttle fleet is powered by natural gas.
- Designed and built a state-of-the-art, high-technology LNG/LCNG fueling station at LAX.
- Acquired over \$5 million in grant funding to offset the differential cost of AFVs.
- Partnered with the Department of Water and Power to install 32 public access electric vehicle charging stations at LAX.
- Partnered with Praxair, BP, SCAQMD, California Energy Commission, and the U.S. DOE to build the first retail hydrogen fueling station at an airport.
- The AFV program has been recognized as one of the most successful airport AFV programs in the nation and a world-class model for airports and other agencies. Awards and recognition include:

- Clean Air Awards from the Coalition for Clean Air and South Coast Air Quality Management District
- Certificate of Distinguished Achievement from the California Natural Gas Vehicle Coalition
- Clean Cities Certificate for participation in the U.S. Department of Energy's Clean Cities Program.
- Recognized by the U.S. Department of Energy Clean Cities Program as a "success story for airports"

8.2 Rideshare

Each year, LAWA's Rideshare Program saves over 7 million vehicle miles, over 500,000 gallons of gasoline, nearly 7.9 billion pounds of air pollutants, thousands of dollars in insurance and vehicle depreciation costs, and countless hours spent on Southern California's over-burdened streets and freeways. LAWA's multi-faceted Rideshare Program includes 63 vanpools, 74 carpools, 380 free monthly transit passes, and numerous marketing and advocacy activities to recruit and retain program participants. Currently, about 27% of LAWA's employees are participating in the Rideshare Program, saving over 1,000 vehicle trips to LAWA facilities every day.

During 2006, LAWA received two national awards for the Employee Rideshare Program. LAWA is one of only 11 organizations in the country and the only airport to have received a Gold Medal in the U.S. EPA's "Best Workplaces for Commuters" (BWC) Program "2006 Race to Excellence". The BWC Program is a public-private partnership founded by the EPA and the United States Department of Transportation to assist participating employers by offering public recognition and promotion, technical assistance, training, Web-based tools, and forums for information exchange. The annual "BWC Race to Excellence" program acknowledges companies that have gone above and beyond in utilizing the BWC program tools to increase visibility and rideshare program participation.

The second national award was received from the Association for Commuter Transportation (ACT) for "Outstanding Service in the Public Sector" for LAWA's Transit Program "A Free Ride to the Airport." Since LAWA began distributing free transit passes to its employees in March 2005, transit program participation has increased over 200% and ridership continues to climb approximately 9% higher each month. Only one of these awards was given nationally and LAWA was honored as the single best public sector rideshare program in the country. In addition to national recognition, LAWA's Rideshare Program also received the 2008 L.A. Metro/Ventura County Regional Rideshare Diamond Award in the category of "Outstanding Marketing" for LAWA's Annual Rideshare Haunted Halloween Open House and costume contest. Overall, LAWA has won 12 consecutive Diamond Awards over the past 10 years.

9.0 Summary

To date, all applicable mitigation measures adopted for the LAX Master Plan MMRP are in the process of being implemented. Some mitigation measures were complied with by the development of program plans, while others are

satisfied by their incorporation into LAX Master Plan project designs and/or construction specifications. The majority of the “Stand-Alone” mitigation plans are already in-progress if not completed. All applicable mitigation measures triggered by the first LAX Master Plan project, the SAIP, have been implemented. LAWA will continue to monitor and report annually on the progress of the LAX Master Plan MMRP as implementation of the program progresses.

APPENDIX A

LAX MASTER PLAN MMRP AS ADOPTED SEPTEMBER 2004

REFERENCE

**LAWA Website: <http://www.laxmasterplan.org/publications.cfm>
for a copy of the document**

APPENDIX B

SAIP MMRP (NEW MEASURES, MODIFIED MEASURES, AND SAIP SPECIFIC MEASURES)

USERS GUIDE

The contents of this document constitute the Mitigation Monitoring and Reporting Program (MMRP) applicable to projects developed under the Los Angeles International Airport (LAX) Master Plan. The MMRP specifies the monitoring and reporting requirements related to implementation of Master Plan Commitments and Mitigation Measures set forth in the LAX Master Plan Final Environmental Impact Report (FEIR), which is a program EIR that addresses the overall Master Plan, as well as the implementation of additional mitigation measures, if any, set forth in subsequent environmental review documents that tier off of the Master Plan FEIR, but are specific to an individual project. In addition to the FEIR and subsequent related environmental review documents completed in accordance with the requirements of the California Environmental Quality Act (CEQA), this MMRP includes the Master Plan Commitments and Mitigation Measures set forth in the LAX Master Plan Improvements Final Environmental Impact Statement (FEIS) and the related Federal Aviation Administration (FAA) Record of Decision (ROD) completed in accordance with the requirements of the National Environmental Policy Act (NEPA).

The basic framework of, and requirements for, the MMRP were established in conjunction with approval of the LAX Master Plan in December 2004, and are anticipated to remain in effect throughout implementation of the Master Plan. If, additional new mitigation measures are required in conjunction with subsequent environmental (i.e., CEQA) review of individual projects proposed under the Master Plan, the MMRP will be updated to include such additional project-specific measures. These new project-specific mitigation measures will be added at the end of the MMRP to supplement, but will not replace or duplicate the Master Plan Commitments and Mitigation Measures that otherwise apply based on the MMRP adopted for the Master Plan. The tab dividers of this document define the location of: (1) the LAX Master Plan MMRP (i.e., the "base" document); (2) a delineation of administrative refinements made to the LAX Master Plan MMRP, based on certain refinements to Master Plan commitments and mitigation measures occurring in conjunction with the Los Angeles City Council certification of the FEIR in December 2004; and (3) additional project-specific mitigation measures identified in conjunction with CEQA environmental review documents completed subsequent to the Master Plan FEIR.

The MMRP Index, which begins on the following page, provides a comprehensive delineation of all Master Plan commitments, Master Plan mitigation measures, and project-specific mitigation measures adopted to date, and indicates where within this document the completed text of each measure can be found, as well as an indication of the origin of each measure (i.e., the LAX Master Plan FEIR, the LAX Master Plan FEIS/ROD, and individual project EIR such as the South Airfield Improvements Project FEIR). **The MMRP Index provides the most current and comprehensive delineation of which Master Plan commitments and mitigation measures are included within the overall MMRP, recognizing that if, other new mitigation measures are added, the MMRP Index will be updated accordingly.**

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM (INDEX)**

Master Plan Commitments/Mitigation Measures (page no. within the MMRP where full text can be found)		LAX Master Plan FEIR	LAX Master Plan FEIS/ ROD	South Airfield Improve- ment Project FEIR
<i>Noise</i>				
N-1	Maintenance of Applicable Elements of Existing Aircraft Noise. (ref . page no. 3)	X	X	X
MM-N-4	Update the Aircraft Noise Abatement Program Elements as Applicable to Adapt to the Future Airfield Configuration. (ref . page no. 3)	X	X	X
MM-N-5	Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory. (ref . page no. 3)	X		X
MM-N-7	Construction Noise Control Plan. (ref . page no. 3)	X		X
MM-N-8	Construction Staging. (ref . page no. 4)	X		X
MM-N-9	Equipment Replacement. (ref . page no. 4)	X		X
MM-N-10	Construction Scheduling. (ref . page no. 4)	X		X
MM-N-11	Automated People Mover (APM) Noise Assessment and Control Plan. (ref . page no. 5)	X		
<i>Land Use</i>				
LU-1	Incorporation of city of Los Angeles Ordinance No. 159,526 (Q) Zoning conditions for LAX Northside into the LAX Northside/Westchester Southside Project. (ref . page no. 7)	X		
LU-2	Establishment of a Landscape Maintenance Program for Parcels Acquired due to Airport Expansion. (ref . page no. 7)	X		
LU-4	Neighborhood Compatibility Program. (ref . page no. 7)	X		
LU-5	Comply with City of Los Angeles Transportation Element Bicycle Plan. (ref . page no. 8)	X		
MM-LU-1	Implement Revised Aircraft Noise Mitigation Program. (ref . page no. 8)	X		X
MM-LU-2	Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program. (ref . page no. 11)	X		X
MM-LU-3	Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn. (ref . page no. 12)	X		X
MM-LU-4	Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. (ref . page no. 12)	X		X
MM-LU-5	Upgrade and Expand Noise Monitoring Program. (ref . page no. 13)	X		X
<i>Surface Transportation (On-Airport)</i>				
ST-2	Non-Peak CTA Deliveries. (ref . page no. 14)	X		
ST-7	Adequate GTC, ITC, and APM Design. (ref . page no. 14)	X		
ST-8	Limited Short-Term Lane Closures. (ref . page no. 14)	X		
MM-ST-1	Require CTA Construction Vehicles to Use Designated Lanes. (ref . page no. 14)	X		
MM-ST-2	Modify CTA Signage. (ref . page no. 14)	X		
MM-ST-3	Develop Designated Shuttle Stops for Labor Buses and ITC-CTA Buses. (ref . page no. 15)	X		
<i>Surface Transportation (Off-Airport)</i>				
ST-9	Construction Deliveries. (ref . page no. 16)	X		X
ST-12	Designated Truck Delivery Hours. (ref . page no. 16)	X		X
ST-14	Construction Employee Shift Hours. (ref . page no. 16)	X		X
ST-16	Designated Haul Routes. (ref . page no. 16)	X		X
ST-17	Maintenance of Haul Routes. (ref . page no. 16)	X		X
ST-18	Construction Traffic Management Plan. (ref . page no. 16)	X		X
ST-19	Closure Restrictions of Existing Roadways. (ref . page no. 17)	X		

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM (INDEX)**

Master Plan Commitments/Mitigation Measures (page no. within the MMRP where full text can be found)		LAX Master Plan FEIR	LAX Master Plan FEIS/ ROD	South Airfield Improve- ment Project FEIR
ST-20	Stockpile Locations. (ref . page no. 17)	X		
ST-21	Construction Employee Parking Locations. (ref . page no. 17)	X		X
ST-22	Designated Truck Routes. (ref . page no. 18)	X		X
ST-23	Expanded LAX Gateway Improvements/Greening of Impacted Communities. (ref . page no. 18)	X		
ST-24	Fair Share Contribution to Congestion Management Plan (CMP) Improvements. (ref . page no. 19)	X		
MM-ST-6	Add New Traffic Lanes. (ref . page no. 20)	X	X	
MM-ST-7	Restripe Existing Facilities. (ref . page no. 20)	X	X	
MM-ST-8	Add Automatic Traffic Signal Activation Control (ATSAC), Automatic Traffic Control System (ATCS) or Equivalent. (ref . page no. 20)	X	X	
MM-ST-10	Modify Signal Phasing. (ref . page no. 21)	X	X	
MM-ST-12	Provide New Ramps Connecting I-105 to LAX Between Aviation Boulevard and La Cienega Boulevard. (ref . page no. 22)	X	X	
MM-ST-13	Create a new Interchange at I-405 and Lennox Boulevard. (ref . page no. 22)	X	X	
MM-ST-14	Ground Transportation/Construction Coordination Office Outreach Program. (ref . page no. 22)	X		
MM-ST-15	Provide Fair-Share Contributions to Transit Improvements. (ref . page no. 22)	X		
MM-ST-16	Provide Fair-Share Contribution to LA County's project to extend the Marina Expressway. (ref . page no. 23)	X		
<i>Relocation of Residences and Businesses</i>				
RBR-1	Residential and Business Relocation Program. (ref . page no. 24)	X	X	
MM-RBR-1	Phasing for Business Relocations. (ref . page no. 27)	X		
MM-RBR-2	Relocation Opportunities through Aircraft Noise Mitigation Program. (ref . page no. 28)	X		
<i>Environmental Justice</i>				
EJ-1	Aviation Curriculum. (ref . page no. 30)	X		X
EJ-2	Aviation Academy. (ref . page no. 30)	X		X
EJ-3	Job Outreach Center. (ref . page no. 31)	X		X
EJ-4	Community Mitigation Monitoring. (ref . page no. 34)	X		X
<i>Air Quality</i>				
AQ-1	Air Quality Source Apportionment Study. (ref . page no. 35)	X		X
AQ-2	School Air Filters. (ref . page no. 35)	X		X
AQ-3	Mobile Health Research Lab. (ref . page no. 35)	X		X
MM-AQ-1	LAX Master Plan - Air Quality Mitigation Plan for Air Quality. (ref . page no. 36)	X	X	X
MM-AQ-2	Construction-Related Mitigation Measure. (ref . page no. 39)	X	X	X
MM-AQ-3	Transportation-Related Mitigation Measures. (ref . page no. 42)	X	X	X
MM-AQ-4	Operations-related mitigation measures. (ref . page no. 47)	X	X	X
<i>Hydrology and Water Quality</i>				
HWQ-1	Develop Detailed Drainage Plan. (ref . page no. 50)	X		X
MM-HWQ-1	Update Regional Drainage Facilities. (ref . page no. 54)	X		X
<i>Historical/Architectural and Archaeological/Cultural Resources</i>				
HR-1	Preservation of Historic Resources. (ref . page no. 55)	X		

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM (INDEX)**

Master Plan Commitments/Mitigation Measures (page no. within the MMRP where full text can be found)		LAX Master Plan FEIR	LAX Master Plan FEIS/ ROD	South Airfield Improve- ment Project FEIR
MM-HA-1	Historic American Buildings Survey (HABS) Document. (ref . page no. 55)	X		
MM-HA-2	Historic Educational Materials. (ref . page no. 56)	X		
MM-HA-4	Discovery. (ref . page no. 56)	X	X	X
MM-HA-5	Monitoring. (ref . page no. 57)	X	X	X
MM-HA-6	Excavation and Recovery. (ref . page no. 57)	X	X	X
MM-HA-7	Administration. (ref . page no. 58)	X	X	X
MM-HA-8	Archaeological/Cultural Monitor Report. (ref . page no. 58)	X	X	X
MM-HA-9	Artifact Curation. (ref . page no. 58)	X	X	X
MM-HA-10	Archaeological Notification. (ref . page no. 59)	X	X	X
MM-HA-11	Navigational Aids Relocation and Improvements. (ref . FAA Record Of Decision dated May 20 th , 2005, page A-6)		X	
<i>Paleontological Resources</i>				
MM-PA-1	Paleontological Qualification and Treatment Plan. (ref . page no. 60)	X		X
MM-PA-2	Paleontological Authorization. (ref . page no. 60)	X		X
MM-PA-3	Paleontological Monitoring Specifications. (ref . page no. 60)	X		X
MM-PA-4	Paleontological Resources Collection. (ref . page no. 60)	X		X
MM-PA-5	Fossil Preparation. (ref . page no. 61)	X		X
MM-PA-6	Fossil Donation. (ref . page no. 61)	X		X
MM-PA-7	Paleontological Reporting. (ref . page no. 61)	X		X
<i>Biotic Communities</i>				
MM-BC-1	Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area. (ref . page no. 62)	X	X	X
MM-BC-2	Conservation of floral resources: Lewis' evening primrose. (ref . page no. 63)	X		
MM-BC-3	Conservation of floral resources: mature tree replacement. (ref . page no. 64)	X		
MM-BC-8	Replacement of Habitat Units. (ref . page no. 64)	X		X
MM-BC(SA-1)	Replacement of Habitat Units Associated with the South Airfield Improvement Project. (ref . page no. SA-1)	X		X
MM-BC-9	Conservation of Faunal Resources. (ref . page no. 68)	X		X
MM-BC(SA-2)	Conservation of Faunal Resources Associated with the South Airfield Improvement Project. (ref . page no. SA-1)	X		X
MM-BC-13	Replacement of state-designated sensitive habitats. (ref . page no. 71)	X	X	
<i>Endangered and Threatened Species</i>				
MM-ET-1	Riverside Fairy Shrimp Habitat Restoration. (ref . page no. 74)	X	X	
MM-ET-3	El Segundo Blue Butterfly Conservation: Dust Control. (ref . page no. 86)	X	X	X
MM-ET-4	El Segundo Blue Butterfly Conservation: habitat restoration. (ref . page no. 86)	X	X	
<i>Energy Supply</i>				
E-1	Energy Conservation and Efficiency Program. (ref . page no. 89)	X		
E-2	Coordination with Utility Providers. (ref . page no. 89)	X		X
PU-1	Develop a Utility Relocation Program. (ref . page no. 89)	X		X

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MITIGATION MONITORING & REPORTING PROGRAM (INDEX)**

Master Plan Commitments/Mitigation Measures (page no. within the MMRP where full text can be found)		LAX Master Plan FEIR	LAX Master Plan FEIS/ ROD	South Airfield Improve- ment Project FEIR
<i>Light Emissions</i>				
LI-2	Use of Non-Glare Generating Building Materials. (ref . page no. 91)	X		
LI-3	Lighting Controls. (ref . page no. 91)	X		
<i>Solid Waste</i>				
SW-1	Implement an Enhanced Recycling Program. (ref . page no. 92)	X	X	
SW-2	Requirements for the Use of Recycled Materials During Construction. (ref . page no. 92)	X	X	X
SW-3	Requirements for the Recycling of Construction and Demolition Waste. (ref . page no. 92)	X	X	X
MM-SW-1	Provide Landfill Capacity. (ref . page no. 93)	X		
<i>Construction Impacts</i>				
C-1	Establishment of a Ground Transportation/Construction Coordination Office. (ref . page no. 94)	X		X
C-2	Construction Personnel Airport Orientation. (ref . page no. 95)	X		X
<i>Design, Art, and Architecture Applications/Aesthetics</i>				
DA-1	Provide and Maintain Airport Buffer Area. (ref . page no. 96)	X		X
DA-2	Update and Integrate Design Plans and Guidelines. (ref . page no. 96)	X		
DA-3	Undergrounding of Utility Lines. (ref . page no. 96)	X		
MM-DA-1	Construction Fencing. (ref . page no. 96)	X	X	X
<i>Hazardous Materials</i>				
HM-1	Ensure Continued Implementation of Existing Remediation Efforts (ref . page no. 98).	X	X	X
HM-2	Handling of Contaminated Materials Encountered During Construction. (ref . page no. 99)	X	X	X
<i>Water Use</i>				
W-1	Maximize Use of Reclaimed Water.(ref . page no. 101)	X		X
W-2	Enhance Existing Water Conservation Program. (ref . page no. 101)	X		X
<i>Wastewater</i>				
MM-WW-1	Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows. (ref . page no. 102)	X		
<i>Fire Protection</i>				
FP-1	LAFD Design Recommendations. (ref . page no. 103)	X		X
PS-1	Fire and Police Facility Relocation Plan. (ref . page no. 104)	X		
PS-2	Fire and Police Facility space and siting requirements. (ref . page no. 105)	X		
<i>Law Enforcement</i>				
LE-1	Routine Evaluation of Manpower and Equipment Needs. (ref . page no. 106)	X		
LE-2	Plan Review. (ref . page no. 106)	X		

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<i>Historical/Architectural and Archaeological/Cultural Resources</i>					
MM-HA-11 Monitoring Agency:	Navigational Aids Relocation and Improvements. Prior to initiation of any grading and/or excavation activities associated with the proposed improvement and relocation of navigational aids, the FAA shall prepare, or cause to be prepared, an archaeological treatment plan (ATP) that ensures the long-term protection and proper treatment of any previously unknown significant archaeological resources, including any Native American remains, encountered during such grading and/or excavation within the Coastal Zone. Pursuant to Title 36, Code of Federal Regulations (CFR) Part 800, the draft ATP shall be submitted by the FAA to the California State Historic Preservation Officer (SHPO), the California Coastal Commission staff archaeologist, the California Native American Heritage Commission and interested parties for 30-days for review and comment. The final ATP, which incorporates the review comments, shall be submitted by FAA to the SHPO, and the California Coastal Commission staff archaeologist for review and approval. The ATP shall include a monitoring plan, research design, and data recovery plan. The ATP shall be consistent with the Secretary of the Interior's Standards and Guidelines for Archaeological Documentation; California Office of Historic Preservation's (OHP) Archaeological Resources Management Report, Recommended Contents and Format (1989), and the Guidelines for Archaeological Research Design (1991); and shall also take into account the ACHP's publication Treatment of Archaeological Properties: A Handbook. The ATP shall also be consistent with the Department of the Interior's Guidelines for Federal Agency Responsibility under Section 110 of the National Historic Preservation Act (NHPA). The ATP shall include a requirement that a qualified archaeologist be retained by the FAA, or its designee, to monitor the subject grading and excavation activities. The qualified archaeologist shall meet the Secretary of the Interior's Professional Qualifications Standards. The project archaeologist shall be empowered to halt construction activities in the immediate area if potentially significant resources are identified. Test excavations may be necessary to reveal whether such findings are significant or insignificant. In the event of notification by the project archaeologist that a potentially	Potential to unexpectedly encounter and impact subsurface archaeological resources, including Native American remains, during grading and excavation associated with relocation of existing navigational aids located within the coastal zone.	Prior to initiation of grading and/or excavation activities associated with the proposed improvement and relocation of navigational aids in coastal zone.	Once.	Completion of an archaeological treatment plan (ATP) specific to subject grading/excavation activities.

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	significant or unique archaeological/cultural find has been unearthed, the FAA shall be notified and grading operations shall cease immediately in the affected area until the geographic extent and scientific value of the resource can be reasonably verified. The ATP shall also include a requirement that, should any significant archaeological resource or Native American remains be encountered, a Native American monitor shall be retained following consultation with the Native American Heritage Commission, in order to establish the Most Likely Descendent (MLD) associated with the resource/remains.				
<i>Environmental Justice</i>					
MM-EJ-1 Monitoring Agency:	Expedite Residential Soundproofing for Qualifying Property Owners. Prior to commencing operations on the new runway (Alternative A) or relocated runway (Alternatives C and D) related to the northern runway complex, LAWA will increase funding and technical assistance in order to complete residential soundproofing related to LAX aircraft noise within the City of Inglewood and Los Angeles County to the extent feasible, and will seek federal funding assistance from the FAA. Soundproofing shall be offered and provided to all property owners who have not previously received soundproofing and who qualify and choose to participate in the ANMP program, including those who are within the current ANMP boundaries, and those who would be newly exposed to the 65 CNEL or greater noise contour due to commissioning of the northern runway complex. Following fulfillment of existing commitments within the current ANMP, those who would be newly exposed shall be identified based on modeled noise contours prepared at the time the northern runway improvements are designed in order to expedite completion of soundproofing to the extent feasible prior to the commissioning of the northern runway complex. Completion of soundproofing to the extent feasible accepts that: 1) LAWA and the FAA shall offer assistance and funding to the City of Inglewood and Los Angeles County but cannot control their efforts; 2) certain properties may not qualify or may not otherwise be feasible to mitigate; and 3) some property owners may choose not to participate in the ANMP.	Following relocation of existing runways in the northern runway complex, there is the potential for residential development to be newly exposed to the 65 CNEL and significantly impacted until noise attenuation improvements are completed at those residences that qualify for soundproofing.	Prior to commencing operations on the new (relocated) runway.	Once	Confirm notification of eligibility for soundproofing to residences that would be newly exposed to 65 CNEL due to runway relocation.

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<i>Land Use</i>					
MM-LU-3 Monitoring Agency: LAWA	Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn. Current studies of aircraft noise and the ability of children to learn have not resulted in the development of a statistically reliable predictive model of the relative effect of changes in aircraft noise levels on learning. Therefore a comprehensive study shall be initiated by LAWA to determine what, if any, measurable relationship may be present between learning and the disruptions caused by aircraft noise at various levels. An element of the evaluation shall be the setting of an acceptable replacement threshold of significance for CEQA purposes for classroom disruption by both specific and sustained aircraft noise events.	Classroom disruption due to exposure to high single event or cumulative noise levels	Initiation of study upon City Council approval of the LAX Plan	Once, upon approval of the study by LAWA	LAWA approval of completed study
MM-LU-4 Monitoring Agency: LAWA	Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise. Prior to completion of the study required by Mitigation Measure MM-LU-3, Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn, and within six months of the commissioning of any relocated runways associated with implementation of the LAX Master Plan, LAWA shall conduct interior noise measurements at schools that could be newly exposed to noise levels that exceed the interim LAX interior noise thresholds for classroom disruption of 55 dB L max, 65 dB Lmax, or 35 Leq(h), as presented in Section 4.1, <i>Noise</i> , of the Final EIR for CEQA purposes. All school classroom buildings (except those within schools subject to an aviation easement) that are found through the noise measurements to exceed the interim interior noise thresholds, as compared to the 1996 baseline conditions presented in the Final EIR, would become eligible for soundproofing under the ANMP. Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptance of its results by peer review of industry experts, any schools found to exceed a newly established CEQA threshold of significance for classroom disruption based on comparison with 1996 baseline conditions due to implementation of the LAX Master Plan, shall be eligible for participation in the ANMP administered by LAWA, unless they are subject to an	Classroom disruption due to exposure to noise levels in excess of threshold of significance established in MM-LU-3	Within six (6) months of commissioning of any relocated runways (for interim LAX interior noise thresholds component); and upon completion of the study in Mitigation Measure MM-LU-3 (for MM-LU-3 component)	Annually	Conduct noise measurements based on interim LAX interior noise thresholds and on newly established noise thresholds set by MM-LU-3, and make schools eligible for ANMP participation, as appropriate

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existing avigation easement. A determination of which schools become eligible will be made following application of the new threshold based on measured data.					
<i>Hydrology and Water Quality</i>					
HWQ-1 Monitoring Agency: LAWA	<p>Conceptual Drainage Plan. Once a Master Plan alternative is selected, and in conjunction with its design, LAWA will develop a conceptual drainage plan of the area within the boundaries of the Master Plan alternative (in accordance with FAA guidelines and to the satisfaction of the City of Los Angeles Department of Public Works, Bureau of Engineering). The purpose of the drainage plan will be to assess area-wide drainage flows as related to the Master Plan project area, and at a level of detail sufficient to identify the overall improvements necessary to provide adequate drainage capacity to prevent flooding. The conceptual drainage plan will provide the basis and specifications from which detailed drainage improvement plans will be designed in conjunction with site engineering specific to each Master Plan project. Best Management Practices (BMPs) will be incorporated to minimize the effect of airport operations on surface water quality and to prevent a net increase in pollutant loads to surface water resulting from the selected Master Plan alternative.</p> <p>To evaluate drainage capacity, LAWA will use either the Peak Rate Method specified in Part G - Storm Drain Design of the City of Los Angeles' Bureau of Engineering Manual or the Los Angeles County Modified Rational Method, both of which are acceptable to the LADPW. In areas within the boundary of the selected alternative where the surface water runoff rates are found to exceed the capacity of the storm water conveyance infrastructure with the potential to cause flooding, LAWA will take measures to either reduce peak flow rates or increase the structure's capacity. These drainage facilities will be designed to ensure that they adequately convey storm water runoff and prevent flooding by adhering to the procedures set forth by the Peak Rate Method/Los Angeles County Modified Rational Method.</p>	Significant changes in surface hydrology or adverse impacts to surface water quality due to new development associated with the Master Plan	Prior to issuance of a grading/building permit for the first Master Plan project involving substantial surface alternations or substantial changes to existing operations	Once, upon completion of conceptual drainage plan	Completion of conceptual drainage plan

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<p>Methods to reduce the peak flow of surface water runoff could include:</p> <ul style="list-style-type: none"> ◆ Decreasing impervious area by removing unnecessary pavement or utilizing porous concrete or modular pavement ◆ Building storm water detention structures ◆ Diverting runoff to pervious areas (reducing directly-connected impervious areas) ◆ Diverting runoff to outfalls with additional capacity (reducing the total drainage area for an individual outfall) ◆ Redirecting storm water flows to increase the time of concentration <p>Measures to increase drainage capacity could include:</p> <ul style="list-style-type: none"> ◆ Increasing the size and slope (capacity) of storm water conveyance structures (pipes, culverts, channels, etc.). ◆ Increasing the number of storm water conveyance structures and/or outfalls. <p>To evaluate the effect of the selected Master Plan alternative on surface water quality, the Conceptual Drainage Plan will address water quality and drainage issues by specifying source control, structural, and treatment control BMPs with the objective of reducing the discharge of pollutants from the stormwater conveyance system to the maximum extent practicable. Once BMPs are identified, an updated pollutant load estimate will be calculated that takes into account reductions from treatment control BMPs. These BMPs will be applied to both existing and future sources with the goal of achieving no net increase in loadings of pollutants of concern to receiving water bodies. Subsequently, LAWA will prepare Standard Urban Stormwater Mitigation Plans (SUSMP) for individual projects associated with the selected alternative during project design and review based on the Conceptual Drainage Plan, as required by the LARWCQB. The purpose of these SUSMPs will be to evaluate water quality impacts associated with individual project components at a design level of detail, as required by LARWQCB, and to identify specific BMPs that will be</p>				

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	<p>incorporated into the project design. LAWA will therefore address water quality issues, including erosion and sedimentation, and comply with the SUSMP requirements by designing the storm water system through incorporation of the structural and treatment control BMPs specified in the SUSMP.</p> <p>The following list includes some of the BMPs that could be employed to infiltrate or treat storm water runoff and dry weather flows, and control peak flow rates.</p> <ul style="list-style-type: none"> ◆ Vegetated swales and strips ◆ Oil/Water separators ◆ Clarifiers ◆ Media filtration ◆ Catch basin inserts and screens ◆ Continuous flow deflective systems ◆ Bioretention and infiltration ◆ Detention basins ◆ Manufactured treatment units ◆ Hydrodynamic devices <p>Other structural BMPs may also be selected from the literature and the many federal, state and local guidance documents available. Performance of structural BMPs varies considerably based on their design. USEPA has published estimated ranges of pollutant removal efficiencies for structural BMPs based on substantial document review.</p>				
<i>Biotic Communities</i>					
<p>MM-BC-1</p> <p>Monitoring Agency:</p> <p>LAWA</p>	<p>Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to ensure that the state-designated sensitive habitats within and adjacent to the Habitat Restoration Area are conserved and protected during construction, operation, and maintenance.</p>	<p>Temporary construction impacts to sensitive areas and degradation of state-designated sensitive habitats</p>	<p>Preconstruction/const ruction</p>	<p>Once, upon completion of pre-construction evaluation and then on-going during construction if within 100 feet of the Habitat Restoration Area; Annually</p>	<p>Completion of pre-construction evaluation and presence of environmental monitor when construction is within 100 feet of state-designated sensitive</p>

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<p>These steps shall, at a minimum, include the following:</p> <p><i>Implementation of construction avoidance measures in areas where construction or staging are adjacent to the Habitat Restoration Area. Prior to the initiation of construction of LAX Master Plan components to be located adjacent to the Habitat Restoration Area, a pre-construction evaluation shall be conducted to identify and flag specific areas of state-designated sensitive habitats located within 100 feet of construction areas. Subsequent to the pre-construction evaluation, a pre-construction meeting shall be conducted and written construction provided avoidance measures to be implemented in areas adjacent to state-designated sensitive habitats. Construction avoidance measures include erecting a 10-foot-high tarped chain-link fence where the construction or staging area is adjacent to state-designated sensitive habitats to reduce the transport of fugitive dust particles related to construction activities. Soil stabilization, watering or other dust control measures, as feasible and appropriate, shall be implemented to reduce fugitive dust emissions during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area, with a goal to reduce fugitive dust emissions by 90 to 95 percent. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of a state-designated sensitive habitat. LAWA or its designee shall incorporate provisions for the identification of additional construction avoidance measures to be implemented adjacent to state-designated sensitive areas. All construction avoidance measures that address Best Management Practices shall be clearly stated within construction bid documents. In addition, provisions shall be included in all construction bid documents requiring the presence of a qualified environmental monitor. Construction drawings shall indicate vegetated areas within the Habitat Restoration Area as "Off-Limits Zone."</i></p> <p><i>Ongoing maintenance and management efforts for the El Segundo Blue Butterfly Habitat Restoration Area. LAWA or its designee shall ensure that maintenance and management efforts prescribed in the Habitat Management Plan (HMP) for the Habitat Restoration</i></p>			during operation and maintenance	habitat; Periodic Monitoring Report

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	Area shall continue to be carried out as prescribed.				
MM-BC-2 Monitoring Agency: LAWA	Conservation of Floral Resources: Lewis' Evening Primrose. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. A plan shall be prepared and implemented to compensate for the loss of individuals of the sensitive Lewis' evening primrose, currently located at the westerly end of the north runway and within the Habitat Restoration Area. Seed shall be collected from those plants to be removed, and properly clean and store the collected seed until used. If possible, seeds shall be collected in multiple years to ensure an adequate seed supply for planting. A mitigation site of suitable habitat equal to the area of impact shall be delineated within areas of the Los Angeles/El Segundo Dunes as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." Collected seed shall be broadcast (distributed) after the first wetting rain. A monitoring plan shall be implemented to monitor the establishment of individuals of Lewis' evening primrose for a period of not more than five years. Performance criteria shall include the establishment of an equal number of plants as that impacted in the first year following the distribution of seed within the mitigation site. Performance criteria shall also include confirmation of recruitment for two years following the first year flowering is observed and establishment of individuals throughout the mitigation area within three years following the first year flowering is observed. Monitoring shall be undertaken in the manner set forth in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan"..	Loss of individuals of Lewis' evening primrose	At least five (5) years prior to initiation of construction of North Runways	As per Conservation Plan for Lewis' Evening Primrose	Preparation of Conservation Plan for Lewis' Evening Primrose; Periodic Monitoring Report
MM-BC-9 Monitoring Agency: LAWA	Conservation of Faunal Resources. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 1.34 habitat units (0.3 habitat units + 1.04 habitat units) of occupied western spadefoot toad habitat and for the loss of western spadefoot toad individuals currently in the southwestern portion of the AOA. LAWA or its designee shall identify possible relocation sites in consultation with the CDFG and USFWS and shall develop and implement a monitoring plan to monitor the success of the relocated	Loss of habitat occupied by sensitive species	Preparation of Conservation Plan for Faunal Resources within three (3) years of City Council approval of the LAX Plan; Implementation per Conservation Plan. Toad relocation and monitoring component of the	As per Conservation Plan for Faunal Resources	Preparation of Conservation Plan for Faunal Resources; Periodic Monitoring Report

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<p>tadpoles for a period of not more than five years. LAWA or its designee shall relocate the western spadefoot toad population currently inhabiting three locations on the AOA. One potential site is the Madrona Marsh Nature Center in Torrance, 20 miles south of LAX, which supports several vernal pools and one large pond capable of supporting western spadefoot toads. Spadefoot toad experts suggest the best approach to accomplish relocation is to transport tadpoles and metamorphs only, as adults return to their birth site. Site preparation shall include confirmation by a permitted biologist that no predators, such as mosquitofish or bullfrogs, are present within the proposed relocation site or in waterways surrounding the relocation site. The CDFG has suggested that if the first relocation effort is not successful, another attempt should be made the following year. Therefore, western spadefoot toads shall be collected two consecutive years prior to construction activities taking place in existing occupied spadefoot toad habitat. In addition, since the western spadefoot toad is known to become reproductively mature within three years, an additional performance criterion shall be the identification of tadpoles at the relocation site between years three and four. The success criteria should be 50 percent survival of all tadpoles and metamorphs for the first, second, and third years following the last relocation. This shall be accomplished through a five-year monitoring plan, with bi-monthly monitoring between January 31 and June 1, to document the success of this relocation effort.</p> <p>LAWA or its designee shall develop and implement a relocation and monitoring plan to compensate for the loss of 2.38 habitat units of occupied San Diego black-tailed jackrabbit habitat located within the AOA. LAWA or its designee shall relocate the San Diego black-tailed jackrabbit population currently inhabiting the AOA. Relocation efforts shall be coordinated with CDFG. The San Diego black-tailed jackrabbit shall be captured on the AOA using live traps and shall be released into the Habitat Restoration Area. Compensation for the loss of 2.38 habitat units shall be the utilization of at least 2.38 habitat units within the Los Angeles/El Segundo Dunes by the San Diego black-tailed jackrabbit individuals relocated to the site. Black-tailed jackrabbit is currently</p>		<p>Conservation Plan to be undertaken in connection with MM-ET-1 (Riverside Fairy Shrimp Habitat Restoration)</p>		

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<p>absent for the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 2.38 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Fore dune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Fore dune to Southern Fore dune. LAWA or its designee shall implement a monitoring plan to monitor the success of the relocated individuals for a period of not more than five years. Performance criteria shall include confirmed success of survival for three years of the San Diego black-tailed jackrabbit within the Habitat Restoration Area. This shall be accomplished through a quarterly monitoring plan to document the success or failure of this relocation effort.</p> <p>LAWA or its designee shall compensate for the loss of areas utilized by loggerhead shrike currently located on the western airfield and composed of 10.83 habitat units (equivalent to 83.25 acres). Compensation for the loss of 10.83 habitat units of habitat utilized by the loggerhead shrike shall be the utilization of at least 10.83 habitat units within the Los Angeles/El Segundo Dunes. Opportunities for compensation for the loss of 10.83 habitat units include 13.52 habitat units from restoration of Non-Native Grassland/Ruderal habitat to a Valley Needlegrass Grassland; 14.4 habitat units from removal and restoration of 50 percent of the existing roadways to Southern Fore dune; and 59.68 habitat units from restoration of Disturbed Dune Scrub/Fore dune to Southern Fore dune. Compensation for the loss of at least 10.83 habitat units shall take place prior to construction. LAWA or its designee shall implement a monitoring program for a period of not more than five years. Performance criteria shall include the use of at least 10.83 habitat units of improved habitat by the loggerhead shrike for foraging and nesting. Monitoring shall take place quarterly for the first three years and biannually thereafter. Monitoring shall be timed appropriately to include monitoring during the breeding period, which is between February and June.</p> <p>As a means of minimizing incidental take of active nests of</p>				

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	<p>loggerhead shrike, LAWA or its designee shall have all areas to be graded surveyed by a qualified biologist at least 14 days before construction activities begin to ensure maximum avoidance to active nests for loggerhead shrike. Construction avoidance measures shall include flagging of all active nests for loggerhead shrike and a 300 feet wide buffer area shall be designated around the active nests. A biological monitor shall be present to ensure that the buffer area is not infringed upon during the active nesting season, March 15 to August 15. In addition, LAWA or its designee shall require that vegetation clearing within the designated 300 feet buffer be undertaken after August 15 and before March 15.</p> <p>The FAA or LAWA as appropriate, or the respective designee of each, shall conduct pre-construction surveys to determine the presence of individuals of sensitive arthropod species, the silvery legless lizard, the San Diego horned lizard, and the burrowing owl within the proposed area of impact within the Los Angeles/El Segundo Dunes. Surveys will be conducted at the optimum time to observe these species as described in Section 6.1 of the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." Should an individual be observed, they will be relocated to suitable habitat for that species within the Habitat Restoration Area. Prior to construction, the FAA or its designee shall develop and implement a relocation plan to avoid the potential loss of individuals from the installation of navigational aids and associated service roads. This relocation plan is provided in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". Relocation efforts shall be undertaken by a qualified biologist, in coordination with CDFG.</p>				
<p>MM-BC-13</p> <p>Monitoring Agency:</p> <p>LAWA</p>	<p>Replacement of State-Designated Sensitive Habitats. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. Mitigation shall be undertaken for the loss of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, including the Habitat Restoration Area. Installation of navigational aids and associated service roads under</p>	<p>Loss of state designated sensitive habitat</p>	<p>Preparation of Replacement Plan for State-Designated Sensitive Habitats prior to relocation of navigational aids; Implementation per</p>	<p>As per Replacement Plan for State-Designated Sensitive Habitats</p>	<p>Preparation of Replacement Plan for State-Designated Sensitive Habitats; Periodic Monitoring Report</p>

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<p>Alternative D would result in impacts to 66,675 square feet (1.53 acres) of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes, square feet (0.24 acre) are within habitat occupied by the El Segundo blue butterfly. Impacts to 1.53 acres of State-designated sensitive habitat within the Los Angeles/El Segundo Dunes shall be replaced at a ratio of 2:1 within the Los Angeles/El Segundo Dunes as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". Additionally the removal of existing navigational aides no longer required to assist aircraft approaching from the west has the potential to disturb an estimated 1.4 acres of State-designated habitat within the Los Angeles/El Segundo Dunes. These 1.4 acres will be replaced at a ratio of 2:1 as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan". The replacement of State-designated sensitive habitat shall be undertaken through restoration of 2.8 acres as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan." The restoration and enhancement of biotic communities as related to the establishment or enhancement of wildlike habitat shall consider and comply with the provisions of FAA Advisory Circular 150/5200-33 regarding hazardous wildlife attractants on or near airports. Additionally, such restoration and enhancement shall take into account, as appropriate, the Memorandum of Agreement between the FAA and other federal agencies, including the US Fish and Wildlife Service (USFWS), pertaining to environmental conditions that could contribute to aircraft-wildlife strikes.</p> <p>Valley Needlegrass Grassland restoration efforts consist of site preparation, propagation and planting of Valley Needlegrass Grassland species, and maintenance and monitoring of the restoration site as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan."</p> <p>Southern Foredune restoration efforts consist of site preparation, propagation, and planting of the species characteristic of the Southern Foredune community at the Los Angeles/El Segundo Dunes, and maintenance and monitoring of the restoration site as described in the "Los Angeles/El Segundo Dunes Habitat</p>		Replacement Plan		

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Master Plan Commitments/ Mitigation Measures		Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indication Compliance
	Restoration Plan." Replacement of the 10,597 square feet (0.24 acre) of habitat occupies by the El Segundo Blue Butterfly shall be undertaken as described in Mitigation Measure MM-ET-4, El Segundo Blue Butterfly Conservation: Habitat Restoration.				
MM-ET-4 Monitoring Agency: LAWA	El Segundo Blue Butterfly Conservation: Habitat Restoration. FAA is responsible for conservation measures related to the relocation of navigational aids, while LAWA is responsible for all other conservation measures. All necessary steps shall be taken to avoid the flight season of the El Segundo blue butterfly (June 14 - September 30) when undertaking installation of navigational aids and associated service roads proposed under Master Plan Alternative D within habitat occupied by the El Segundo blue butterfly. Installation of navigational aids within the Habitat Restoration Area should be required to take place between October 1st and May 31st. In conformance with the Biological Opinion, activities associated with navigational aids development shall be limited to the existing roads and proposed impacts areas as depicted in the Final EIR. Coast buckwheat shall be planted a minimum of three years prior to the impact, not only to allow for establishment of the plants, but also to ensure that the plants are mature enough to bloom. The plantings of coast buckwheat shall be located within the southwest corner of subsite 23 of the Habitat Restoration Area, as depicted in Figure F5-5, and shall encompass 3 acres as described in the "Los Angeles/El Segundo Dunes Habitat Restoration Plan" (1.25 acres of which is in conformance with the Biological Opinion). Coast buckwheat plants will be planted at an initial density of 200 plants per acre to ensure the long term planting density target (130 plants per acre). Coast buckwheat plants will be placed in clusters or groupings based on microtopographic features present within subsite 23 to better support the El Segundo Blue Butterfly, which is known to prefer large clusters of plants for nectaring and shelter. As possible, depending on the location and condition of individual plants, FAA and LAWA shall salvage existing coast buckwheat plants and any larvae on the plant or pupae in the soil below the plant that would be removed to accommodate the replacement navigational aids to further conserve this species. These plants shall be salvaged immediately prior to the	Loss of habitat occupied by endangered El Segundo blue butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly 3 years prior to construction activities within its habitat, or as approved by USFWS; Monitoring for a period of not more than 5 years	As per Habitat Restoration Plan for the El Segundo Blue Butterfly	Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly; Periodic Monitoring Report

**LAX MASTER PLAN ALTEARNITIVE D
MITIGATION MONITORING & REPORTING PROGRAM
REVISED MITIGATION MEASURES**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indication Compliance
<p>installation of the replacement navigational aids outside of the butterfly flight season. These salvaged plants shall be transported in a suitable container and replanted after the onset of winter rains in subsite 23 near the restored area as described in MM-BC-13, Replacement of State-Designated Sensitive Habitats. This area shall be the designated mitigation site for planting coast buckwheat and the site to which El Segundo blue butterfly pupae shall be relocated. Gathering of coast buckwheat seed shall take place from September 15 through June 1. Propagation and planting methodologies successfully employed by LAWA during 1984 through 1994 restoration efforts shall be employed for propagation of additional coast buckwheat plants. An existing irrigation system proximal to subsite 23 will be used to increase the success of the restoration effort. Prior to navigational aid installation, a permitted and qualified biologist shall salvage El Segundo blue butterfly larvae in coordination with the USFWS in order to minimize impacts to the butterfly. Based on LAWA's restoration experience within the Habitat Restoration Area, occupation of restored habitat can occur within two to three years of restoration efforts. Therefore, there would be no net loss in acres or value of occupied habitat. Additionally, after the navigational aid system is in place and during the first subsequent flight season of the El Segundo blue butterfly, LAWA shall document El Segundo blue butterfly behavior with respect to the lighting system and submit a monitoring report to USFWS.</p> <p>Lastly, LAWA shall coordinate with the USFWS to create educational materials on the El Segundo blue butterfly for integration into LAWA's public outreach program.</p>				

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance		
Surface Transportation (Off-Airport)						
MM-ST-6 Monitoring Agency: LAWA	Add New Traffic Lanes. Traffic lanes shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction, sufficient to increase the capacity of the intersection without unnecessarily reducing sidewalk widths, removing on-street parking, or encroaching onto other land uses. By 2008: Arbor Vitae Street & La Cienega Boulevard, Aviation Boulevard & Century Boulevard, Aviation Boulevard & 111th Street, Aviation Boulevard & Imperial Highway, Centinela Avenue & Sepulveda Boulevard, Continental City Drive , I-105 ramps & Imperial Highway, La Cienega Boulevard & 111 th Street, Lincoln Boulevard & 83rd Street, Centinela Avenue & La Cienega Boulevard, Century Boulevard & Hawthorne Boulevard/La Brea Avenue, I-405 northbound off-ramp & Imperial Highway. By 2015: Imperial Highway & Main Street, Imperial Highway & Pershing Drive, Lincoln Boulevard & Manchester Boulevard, Sepulveda Boulevard & 79 th St/80 th St.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Acceptance of construction by LADOT and LADPW, or affected jurisdiction	
MM-ST-7 Monitoring Agency: LAWA	Restripe Existing Facilities. Existing traffic lanes shall be restriped to the satisfaction of LADOT or other appropriate jurisdiction, so that additional lane capacity will be provided without adding any new pavement to the intersection or road segment. By 2008: Airport Boulevard & Arbor Vitae Street, Aviation Boulevard & El Segundo Boulevard, Aviation Boulevard & Imperial Highway, Centinela Avenue and La Cienega Boulevard, Century Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, La Cienega Boulevard & Manchester Avenue, La Tijera Boulevard & Sepulveda Boulevard, Manchester Avenue & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway. By 2015: Aviation Boulevard & Manchester Boulevard, Century Boulevard & La Cienega Boulevard, Grand Avenue & Vista del Mar, La Tijera Boulevard & Manchester Avenue, Arbor Vitae Street & Inglewood Avenue.	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of restriping by LADOT or affected jurisdiction	

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
Surface Transportation (Off-Airport)					
MM-ST-8 Monitoring Agency: LAWA	Add ATSAC, ATCS or Equivalent. Automated Traffic Surveillance and Control (ATSAC) or Adaptive Traffic Control System (ATCS) capability or equivalent shall be added to select intersections to the satisfaction of LADOT or other appropriate jurisdiction. The improved capability will result in a more effective traffic signal network. By 2008: Aviation Boulevard & El Segundo Boulevard, Aviation Boulevard and Rosecrans Boulevard, El Segundo Boulevard & Sepulveda Boulevard, Florence Avenue and La Cienega Boulevard, Mariposa Avenue & Sepulveda Boulevard, Rosecrans Avenue & Sepulveda Boulevard, Hawthorne Boulevard & Imperial Highway, Century Boulevard & Inglewood Avenue, Imperial Highway & Inglewood Avenue, . By 2015: Arbor Vitae Street & La Brea Avenue, Aviation Boulevard & Manchester Avenue, El Segundo Boulevard & La Cienega Boulevard, Sepulveda Boulevard and 83 rd Street, Centinela Avenue E/O La Brea Avenue (link), Imperial Highway W/O Hawthorne Boulevard (link), El Segundo Boulevard W/O Hawthorne Boulevard (link), Sepulveda Boulevard N/O Rosecrans Boulevard (link).	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of signal upgrade from LADOT and LADPW, or appropriate jurisdiction
MM-ST-10 Monitoring Agency: LAWA	Modify Signal Phasing. The traffic signal phasing of select intersections shall be modified to the satisfaction of LADOT or other appropriate jurisdiction, to allow more efficient use of the intersections, particularly those that will experience a notable change in traffic characteristics as a result of the project. By 2008: Douglas Street & Imperial Highway, El Segundo Boulevard & Sepulveda Boulevard, Florence Avenue & La Cienega Boulevard, Imperial Highway & Sepulveda Boulevard, La Cienega Boulevard & Manchester Avenue, Lincoln Boulevard & 83rd Street, Manchester Avenue & Sepulveda Boulevard. By 2015: Highland Avenue/Vista del Mar & Rosecrans	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of signal improvement from LADOT or appropriate jurisdiction

**LAX MASTER PLAN ALTERNATIVE D
MITIGATION MONITORING & REPORTING PROGRAM**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance		
Surface Transportation (Off-Airport)						
	Boulevard, Imperial Highway & Vista del Mar.					
MM-ST-15 Monitoring Agency: LAWA MM-ST-15 (continued)	Provide Fair-Share Contributions to Transit Improvements. Provide fair-share contributions to benefit transit to and from LAX to the satisfaction of LADOT and/or other appropriate jurisdiction or agency. By 2008: Aviation Boulevard and Imperial Highway, Jefferson Boulevard & Lincoln Boulevard, La Tijera Boulevard & Sepulveda Boulevard, Lincoln Boulevard & Teale Street, I-105 W/B off-ramp at Sepulveda Boulevard, Overland Avenue S/O Venice Boulevard (link). By 2015: Howard Hughes Parkway & Sepulveda Boulevard, Lincoln Boulevard & Manchester Avenue, Sepulveda Boulevard & 76th Street/77th Street, Lincoln Boulevard S/O Venice Boulevard (link), Lincoln Boulevard S/O Jefferson Boulevard (link).	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution by LADOT or appropriate jurisdiction and/or agency	
MM-ST-16 Monitoring Agency: LAWA	Provide Fair-Share Contribution to LA County's Project to Extend the Marina Expressway. Provide fair-share contribution to Los Angeles County's project to extend the Marina Expressway (Route 90) to Admiralty Way or complete alternative off-site improvements at the following intersections: By 2015: Bali Way & Lincoln Boulevard, Lincoln Boulevard & Marina Expressway, Lincoln Boulevard & Mindanao Way	Traffic congestion and delays as they relate to the LAX Master Plan program activities	By 2008 or 2015, or prior to certificate of occupancy for associated project component, as specified in the Transportation Improvements Phasing Plan	Once, at issuance of certificate of occupancy of related project	Approval of fair-share contribution or alternative improvement by LADOT and/or Los Angeles County	

**SOUTH AIRFIELD IMPROVEMENT PROJECT
MITIGATION MONITORING & REPORTING PROGRAM
FOR NEW MITIGATION MEASURES¹**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<i>Biotic Communities</i>					
MM-BC (SA)-1 Monitoring Agency: LAWA	Replacement of Habitat Units Associated with the South Airfield Improvement Project. LAWA or its designee shall undertake mitigation for the loss of 17.2 habitat units resulting from implementation of the SAIP. These habitat units shall be replaced at a 1:1 ratio within the FAA owned habitat preserve at the former Marine Corps Air Station El Toro (El Toro site), or other appropriate site.	Impacts on Disturbed/Bare Ground and Non-Native Grassland/Ruderal areas	Preparation of Replacement Plan prior to or concurrent with commissioning of relocated Runway 7R-25L	As per Replacement Plan for Habitat Units	Preparation of Replacement Plan for Habitat Units; Periodic Monitoring Report
MM-BC (SA)-2 Monitoring Agency: LAWA	Conservation of Faunal Resources Associated with the South Airfield Improvement Project. Directed surveys for the San Diego black-tailed jackrabbit and the loggerhead shrike shall be undertaken by a qualified wildlife biologist at least 14 days before construction activities. LAWA or its designee shall relocate any observed San Diego black-tailed jackrabbit individuals currently inhabiting the SAIP project areas. Relocation efforts shall be coordinated with CDFG.	Impacts on San Diego black-tailed jackrabbit habitat and loggerhead shrike habitat	Initiated and completed prior to or concurrent with commissioning of relocated Runway 7R-25L	As per Replacement Plan for Habitat Units	Preparation of Replacement Plan for Habitat Units; Periodic Monitoring Report

¹ The South Airfield Improvement Project is subject to many of the LAX Master Plan Commitments and Mitigation Measures adopted in conjunction with the LAX Master Plan Final EIR. See User Guide located at front of the MMRP.

APPENDIX C

STATUS AND IMPLEMENTATION OF PROGRAM PLANS DATED DECEMBER 2008

**LAX Master Plan Mitigation Measures and Reporting Program (MMRP)
Program Plan Status Update
December 2008**

No.	Program Plan Title	Program Plan Description	Master Plan Commitments/Mitigation Measures Addressed	Status (as of December 2008)
1	Aircraft Noise Abatement Program (ANAP) (existing)	The ANAP sets forth LAWA's noise abatement traffic, flight and runway use procedures and includes ground operations restrictions and other airport noise abatement procedures, restrictions and regulations involving aircraft operations.	MM-N-4: Update the Aircraft Noise Abatement Program elements as applicable to adapt to the future airfield configuration	On-going: Existing LAWA Operations managed by LAWA Noise Management Division provides ongoing updates to ANAP, which will include updates based on modifications to the LAX airfield configuration, as appropriate.
2	Aircraft Noise Mitigation Program (ANMP) (existing)	The ANMP describes the ongoing efforts by LAWA to convert existing incompatible land uses surrounding each of its three noise impacted airports to compatible land uses through the implementation of two noise mitigation strategies: (1) sound insulation of structures; and the acquisition of property followed by the conversion of its incompatible land use to compatible land use (land recycling).	MM-LU-1 : Implement revised ANMP MM-LU-2 : Incorporate residential dwelling units exposed to single event awakenings into ANMP MM-LU-5 : Upgrade and Expand Noise Monitoring Program	On-going: Existing program is in place with periodic report updates to the County of Los Angeles.
3	Master Plan for Air Quality (MPAQ)	The MPAQ identifies the air quality mitigation requirements for the LAX Master Plan. Briefly stated, the objectives of the MPAQ are to maintain or reduce air emissions associated with the construction and operation of the LAX Master Plan to levels equal to (or less than) the thresholds of significance and, at a minimum, keep these emissions below the levels forecasted in the LAX Master Plan EIR.	MM-AQ-1 : LAX Master Plan – Air Quality Mitigation Plan for Air Quality MM-AQ-2 : Construction-Related Mitigation Measures MM-AQ-3 : Transportation-Related Mitigation Measures MM-AQ-4 : Operations-Related Mitigation Measures	In Progress: Master Plan for Air Quality (MPAQ) consists of 4 main parts: MM-AQ-1: Completed in October 2005 and adopted by City Council on January 11, 2006 MM-AQ-2: Completed in October 2005 and adopted by City Council on January 11, 2006 MM-AQ-3: Ongoing. MM-AQ-4: Ongoing. LAWA completed the GSE Inventory and is in the process of developing a GSE conversion policy for implementation LAWA-wide. The overall framework for MM-AQ-4 plan continues to be developed.
4	Ground Transportation Outreach Program (GTOP)	The GTOP establishes appropriate mechanisms to involve and coordinate with other major airport-area development projects to the extent feasible, to ensure that the cumulative impacts of construction traffic in the airport area are coordinated and minimized.	MM-ST-14: Ground Transportation/Construction Coordination Office Outreach Program C-1: Establishment of a GT/CCO	Completed: Final Ground Transportation Outreach Program issued in May 2006.
5	Construction Transportation Management Plan (CTMP)	The CTMP provides additional information regarding the measures from the LAX Master Plan MMRP related to the management of construction traffic during the implementation of the Master Plan. Surface transportation mitigation measures which are unrelated to the movement of construction traffic are not included in this plan.	ST-9: Construction Deliveries ST-12: Designated truck delivery hours ST-14: Construction employee shift hours ST-16: Designated haul routes ST-17: Maintenance of haul routes ST-18: Construction Traffic Management Plan ST-19: Closure restrictions of existing roadways ST-20: Stockpile locations ST-21: Construction employee parking locations ST-22: Designated truck routes	Completed: Final Plan dated May 2005.
6	Archaeological Treatment Plan (ATP)	The ATP focuses on the long-term protection and proper treatment of unexpected archaeological discoveries of federal, state, and/or local significance that might be encountered during construction activities of the LAX Master Plan projects. The purpose of the ATP is to achieve compliance with Section 106 of the National Historic Preservation Act (NHPA), the CEQA, and the environmental guidelines of local agencies.	MM-HA-1 : Historic American Buildings Survey (HABS) MM-HA-2 : Historic educational materials MM-HA-4 : Archaeological discovery MM-HA-5 : Archaeological monitoring MM-HA-6 : Excavation and recovery MM-HA-7 : Administration MM-HA-8 : Archaeological/Cultural Monitoring Report MM-HA-9 : Artifact curation MM-HA-10 : Archaeological notification	Completed: Final Plan approved by the FAA and other outside agencies in early 2006.

7	Paleontological Management Treatment Plan (PMTP)	The PMTP focuses on the identification, recovery, proper treatment, and long-term protection and archival conservation of expected and unexpected paleontological discoveries of federal, state, and/or local significance that might be encountered during construction activities of the LAX Master Plan projects.	MM-PA-1: Paleontological Qualification and Treatment Plan MM-PA-2 : Paleontological authorization MM-PA-3 : Paleontological monitoring specification MM-PA-4 : Paleontological resources collection MM-PA-5 : Fossil preparation MM-PA-6 : Fossil donation MM-PA-7 : Paleontological reporting	Completed: Final Draft issued December 2005 by EMD. LAWA sent the PMTP to the Vertebrate Section of the County of LA Museum on January 11, 2006.
8	Conceptual Drainage Plan (CDP)	The CDP provides an overview of drainage and water quality conditions, capacities, constraints, regulatory framework, and analysis methodologies and identifies options for addressing the LAX Master Plan Alternative D impacts. The CDP provides the basis by which detailed drainage improvement plans shall be designed in conjunction with site engineering specific to each LAX Master Plan improvement project.	HWQ-1: Develop detailed drainage plan	Completed: Draft CDP issued in June 2005 and finalized in December 2005. Consistency Certification received from the Coastal Commission in December 2005.
9	Procedures for Handling of Contaminated Materials during Construction	This procedure focuses on pre-existing previously unknown contaminated materials that may be encountered or is first released, spilled, or generated during construction at any phase or project of the LAX Master Plan implementation.	HM-2: Handling of contaminated materials encountered during construction	Completed: Final document issued in December 2005.
10	SAIP Habitat Replacement Plan (HRP)	The SAIP HRP documents the implementation strategy for the impacted habitat units on disturbed/bare ground and non-native grassland/ruderal areas due to the construction of the SAIP.	MM-BC-8: Replacement of Habitat Units	In Progress: On August 6, 2007 the BOAC approved an MOU between LAWA and the Palos Verdes Peninsula Land Conservancy (PVPLC) for the development of 21 acres of coastal sage/needle grass habitat units in complete fulfillment of LAWA's MM-BC-8 commitment. In November 2008, the first year of the 3 years mitigation was completed. PVPLV selected the "3 Sisters Reserve Habitat" as the restoration site. A site restoration plan, containing proposed plant selection and the specifics of the restoration work, was submitted to LAWA's for review and approval. On November 20, 2008, LAWA staff inspected the "3 Sisters Reserve Habitat" and approved the site selection. Field work will begin in 2009 and will be coordinated with the annual rain.
11	Utilities Relocation Program (URP)	The URP provides a framework to address potential impacts on the existing utilities and to minimize interference with the existing utilities associated with the LAX Master Plan construction.	PU-1: Develop a Utilities Relocation Plan E-2: coordination with utility providers DA-3: undergrounding of utility lines	Completed: Final Report completed in May 2005.
12	Street Frontage & Landscape Development Plan (SFLDP) (Existing)	The SFLDP provides integrated and coordinated landscape design guidelines for new development along the perimeter areas of LAX. It is not intended as a commitment by LAWA to affect and/or change existing conditions.	LU-4 : Neighborhood Compatibility Program LU-5 : Comply with City of LA Transportation Element Bicycle Plan DA-1 : Provide and Maintain Airport Buffer Areas DA-2 : Update and Integrate Design Plans and Guidelines W-1 : Maximize Use of Reclaimed Water W-2 : Enhance Existing Water Conservation Program	Completed: Final SFLDP completed on 03/02/05. After further evaluation of the SAIP project conditions, commitments DA-1and W-2 are not applicable to the SAIP. A note to file dated December 28, 2005 was developed to document the assessment.
13	Water Conservation Program (WCP)	Not yet completed.	W-2: Enhance Existing Water Conservation Program	In Progress: Currently, 35% of all landscaped areas at LAX are irrigated by reclaimed water. The landscaped areas served is limited to those areas accessible to the reclaimed water supply pipeline. Approximately 40.2 million gallons or 123 acre-feet of water is conserved each year through the use of reclaimed water. Additionally, much of the irrigation system at LAX is monitored and controlled through a centralized computer irrigation control center. This system further conserves valuable water resources. Buildings and terminals at LAX feature low-flow devices on all toilets and sinks, with phone numbers prominently posted in all restrooms so people can notify maintenance staff if they encounter leaky faucets or other water problems. In addition, water used in on-

				<p>airport car wash facilities is recycled.</p> <p>LAWA is also working with DWP to determine the feasibility of bringing reclaimed water into the Central Terminal Area for use in the Central Utilities Plant cooling tower. The DWP estimates that this will reduce LAX's water usage by approximately 90 acre/ft per year.</p>
14	Landscape Maintenance Program (LMP)	Not yet completed.	<p>LU-2: Establishment of an LMP for parcels acquired due to airport expansion</p> <p>DA-1: Provide and maintain airport buffer areas</p>	In Progress: LAWA currently integrating existing plans or existing procedures under the Residential Acquisition Division (RAD) that will form the basis of the LMP.
15	Residential & Business Relocation Plan (Draft Relocation Plan) (DRP)	The DRP provides procedures for implementing LAWA's LAX MP Relocation Assistance Program (RAP) in accordance with applicable laws, regulations, and policies. The Uniform Act and Title 49 CFR Part 24 serve as the basis for the policies and procedures established in this plan.	<p>RBR-1: Residential and Business Relocation Program</p> <p>MM-RBR-1: Planning for business relocation</p> <p>MM-RBR-2: Relocation opportunities through ANMP</p>	In Progress: Draft Relocation Plan approved by the BOAC in Dec 2004. Final Relocation Plan is currently being developed.
16	Fire & Police Facility Program (FPFP)	Not yet developed.	<p>PS-1: Fire and Police Facility Relocation Plan</p> <p>PS-2: Fire and Police Facility space and siting requirements</p>	In Progress.
17	Solid Waste Recycling Plan (SWRP): <i>May or may not be required if updates to an existing plan will satisfy this commitment.</i>	Not yet developed.	SW-1: Implement an Enhanced Recycling Program	In Progress: A part of LAWA's sustainability efforts.

APPENDIX D

MONTLY SAIP NOISE HOTLINE REPORTS



Los Angeles World Airports
Southside Airfield Improvement Project
February 2008 Noise Hotline Report

Highlights

1. Reporting period: February 1, 2008 through February 29, 2008.
2. Received one call which was a inquiry call. A copy of the log is attached.
3. Tested the hotline during day and night shifts. All is working well and calls are covered 24 hours, seven days a week.

Report prepared by:

Chris Harris

Harris & Company

Phone: 213-749-3386

Email: chris.harris@pacbell.net

March 3, 2008



Los Angeles World Airports
Southside Airfield Improvement Program

24-hour, toll-free hotline: (866) 758-LAWA (758-5292)

Call Log / Complaint Form

Please complete all applicable spaces and print legibly.

_____ **Complaint** **Inquiry**

Date of Call: 2/4/08

Time of Call: 4:17 p.m.

Staff: Neil

Caller Name: Frank

Telephone No.: (310) 719-7000

Caller address or nearby cross-streets: Didn't give info.

Description of Inquiry: He called regarding windows and sound insulation.

Call Referred To: Window Info. number

Date: 2/4/08

Time: 4:30 p.m.

Action Taken: Returned call to Frank and gave him the phone number to call about (sound) windows. The number is 310-215-6069.

APPENDIX E

AIRPORT SUSTAINABLE PLANNING, DESIGN, AND CONSTRUCTION GUIDELINES

REFERENCE

LAWA Website:
<http://www.lawa.org/welcomeLAWA.aspx?id=1036>
for a copy of the document