

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

**2005 ANNUAL PROGRESS REPORT**

**Prepared for Los Angeles World Airports**

## LAX Master Plan MMRP Annual Progress Report February 2006

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- F. Los Angeles World Airports Environmental Management Division (Internal Report): "Monitoring Report for the Conservation of the Riverside Fairy Shrimp Cysts from the Los Angeles International Airport July 13 - August 8, 2005."
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## 1. Executive Summary

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) on December 7, 2004. Pursuant to Section 15097 of the 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 first 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. The Los Angeles City Council approved the SAIP and certified FEIR on January 11, 2006. The 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 is also reported in this document.

Applicable 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 according 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. The program plans 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 are implemented by requiring the Contractor to comply with specific environmental requirements. Key areas of mitigation include reduction of traffic impacts by requiring construction deliveries to not coincide with peak traffic periods; and construction equipment replacements for noise control and air pollution. Some mitigation measures, such as, measures to maximize use of reclaimed water, were incorporated into the design of the project as part of 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 of this report.

## 2. Introduction/Background

In December, the Los Angeles City Council approved the LAX Master Plan and related entitlements for the future development of LAX. The LAX Master Plan provides 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 to include such additional project-specific measures.

**Appendix B** includes the subsequent project-specific MMRP documents for the SAIP: (1) a 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 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 FAA Final Environmental Impact Statement and Record of Decision, or 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, and the MMRP Index will be updated accordingly.

This MMRP is the program by which compliance with the proposed mitigation measures, the timing of implementation, and the required reporting procedures identified is ensured. 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. The LAWA Office of Environmental Affairs (OEA) leads the effort in compliance with support from LAWA's Environmental Management Division (EMD), Noise Management Division (NMD), and Major Projects Development Division (MPDD). LAWA's OEA is responsible for issuing this MMRP progress report on an annual basis.

### 3. 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 tentatively 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 the mitigation measure, define the process of implementation, and establish monitoring and reporting requirements. The 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 numerous 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 2005. There are 13 program plans triggered by the SAIP. LAWA has developed 12 of the 13 program plans and implemented applicable provisions for the first Master Plan project. The 13<sup>th</sup> program plan, SAIP Habitat Replacement Plan, is being implemented concurrent with the construction of the SAIP. The 13 program plans are denoted by bold font in Appendix C.

Status --> Implemented: 13 of the 17 program plans are applicable to the first LAX Master Plan project. LAWA has developed the 13 program plans and has implemented applicable provisions of each program plan to the first Master Plan project.

#### 4. Design-Related Mitigation Requirements

Design mitigation measures are design requirements that can be incorporated during the design phase of a project. The project-level tiered SAIP FEIR identified design mitigation requirements applicable to the SAIP. All applicable design mitigation measures are identified in **Appendix D** as “Italics” font.

Examples of design mitigation measures that have been incorporated into the SAIP 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 SAIP design team coordinated 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 SAIP design team included a design requirement for the Contractor to utilize reclaimed water as feasible to satisfy this commitment.
FP-1 LAFD Design Recommendations	Commitment FP-1 LAFD Design Recommendations 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 equipments, and other recommendations.

Status --> Implemented: The SAIP contract design plans incorporated the above requirements during the design phase of the project.

#### 5. Construction-Related Mitigation - South Airfield Improvement Project

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. **Appendix D** presents a spreadsheet that details further how each of the SAIP mitigation measures is complied with and the current status of each mitigation measure. The construction-related mitigation measures are identified as “**bold**” font in Appendix D. Most of the construction related mitigation measures are complied with utilizing two mechanisms:

1. Inclusion of mitigation requirements into the construction contract specifications of the SAIP – specific mitigation requirements have been incorporated into the SAIP contract specifications.
2. To ensure compliance, a Field Manual specific to the SAIP was developed to monitor and report on mitigation activities.

For a detailed description of each mitigation measure, please reference Appendix A, the LAX Master Plan MMRP as adopted September 2004.

Examples of construction-related mitigation measures that have been incorporated into the SAIP construction contract specifications are briefly described below:

<u>MMRP Commitment or Mitigation Measure</u>	<u>Implementation Requirement</u>
MM-N-7 Construction Noise Control Plan	The Contractor is required to develop a project specific construction noise control plan subject to the review and approval of LAWA. The plan will include scheduling of noisiest construction activities to avoid noise sensitive times, construction staging areas to be as far from noise sensitive areas, and noisy equipments will be replaced with quieter equipments as feasible.
ST-18 Construction Traffic Management Plan	Contractor is required to develop a project specific traffic management plan subject to the review and approval of LAWA. The plan will designate detour and/or haul routes, restrict construction delivery times, and other relevant factors to minimize traffic congestion during construction.
MM-AQ-2 Construction-related air quality mitigation measures	Specific construction-related air quality mitigation measures are included in Contractor's specifications. Measures such as requirements to apply non-toxic soil stabilizers to all inactive construction areas for fugitive dust control; require construction employees commute hours during off peak hours, and prohibit diesel construction equipments from idling in excess of 10 minutes; and other measures as specified in MM-AQ-2.

Status --> Implemented: Construction mitigation measures are included as specification language in the Contractor's contract documents and are enforceable with penalty clauses for non-compliance. These construction mitigation requirements will be

monitored and reported weekly by LAWA staff during the entire duration of the SAIP construction contract. To assist LAWA staff in monitoring efforts, LAWA has developed a field manual specific for the SAIP. The SAIP MMRP Field Manual is a guidance document internally for LAWA to document field monitoring activities. The manual provides a summary checklist and general reporting procedures during construction.

## **6. “Stand-Alone” Mitigation Plans**

“Stand-alone” mitigation plans are derived from specific mitigation measures to address LAX Master Plan overall impacts. 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.

			Completed	In Progress	Existing Policy	Future Plan
<b>Table 1: "Stand-Alone" Mitigation Plans - Summary Status</b>						
<b>6.1</b>	<b>Noise Mitigation Plans</b>					
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		
<b>6.2</b>	<b>Air Quality Mitigation Plans</b>					
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		
<b>6.3</b>	<b>Biotic Communities</b>					
6.3.A	MM-ET-1	Riverside Fairy Shrimp Habitat Restoration		X		
6.3.B	MM-BC(SA)-1	Replacement of Habitat Units associated with the SAIP		X		
6.3.C	MM-BC(SA)-2	Conservation of Faunal Resources associated with the SAIP		X		
<b>6.4</b>	<b>Hydrology and Water Quality</b>					
6.4.A	HWQ-1	Develop Conceptual Drainage Plan	X			
<b>6.6</b>	<b>Environmental Justice</b>					
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 are related 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 Federal Aviation Administration (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 by NMD includes 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 performing maintenance of 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: LAWA NMD will update the ANAP, if required, upon the completion of the SAIP construction.

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.”***

LAWA initiated the Part 161 Study in June 2005. The Part 161 Study is a technical and legal study regarding implementation of a Noise and Access Restriction. The proposed restriction aims to restrict 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). 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: Based on the evaluation of proposals received from three consultant teams, LAWA selected the firm of Harris Miller Miller & Hanson Inc. (HMMH) to prepare the Part 161 Study for LAX. LAWA/HMMH began the Study in June 2005, which is expected to take approximately 3 years to complete. 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 Federal Aviation Administration of the required reports and application materials. The work effort underway by LAWA/HMMH is in data collection and analysis stage, specifically as related to defining particular Community Noise Equivalent Level (CNEL) contours and single event noise contours related to the East Departures at LAX. Research is also being conducted into the issue of sleep disturbances from these east departures. The overall work effort is on schedule.

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 aviation 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 ANMP to include libraries as noise-sensitive uses eligible for aircraft noise mitigation.*

◆ *Upon completion of 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 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 County of Los Angeles. The last update was the 2003 ANMP update which was submitted in October of 2004. 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 all 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 the rate of participation is voluntary.
- ◆ LAWA makes available land use mitigation funds when requested;
- ◆ Except where California Airport Noise Standards deem acoustical treatments alone as insufficient to convert residential land uses to compatible uses with airport operations, aviation easements are no longer 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: LAWA NMD is currently developing methodology to produce single event noise contours. Consultants were tasked with developing the methodology for producing 94 SEL contours that LAWA will be able to update annually throughout the Master Plan implementation. The work began in December of 2005, and will likely be completed by May of 2006 with the first annual single event contours produced for calendar year 2005 by June or July of 2006. Contours will be updated annually and will be transferred to a database. LAWA's soundproofing group will receive the number and the exact location of the affected properties. LAWA's Soundproofing Group will then reevaluate and amend the current program 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 initiated the process to procure a consultant to perform the unprecedented study. In preparation of the Request for Proposal (RFP) process, LAWA has developed a draft scope of services that is undergoing internal review at this time.

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 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 EIS/EIR, would become eligible for soundproofing under the ANMP.*

*Upon completion of the study required by Mitigation Measure MM-LU-3 and acceptable 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 aviation 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 prior to the completion of the study required by MM-LU-3 and within six months of the commissioning of the relocated South Runway 7R-25L.

#### 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 siting, 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.”

LAWA NMD currently produces quarterly Noise Monitoring Reports required by the California Airport Noise Standards for LAX, as well as for Ontario International Airport (ONT), and Van Nuys Airport (VNY). In order to do this, LAWA operates and maintains a sophisticated Aircraft and Noise Monitoring and Management System (ANMMS). The existing ANMMS includes 46 permanent noise monitors stationed in neighborhoods around the three airports, flight data collection equipment located at the FAA Southern California Terminal Radar Approach Control in San Diego, three passive secondary surveillance radar units located at LAX, ONT, and in North Hollywood for VNY, and several other data sources and data collection devices. The existing ANMMS data is processed to : (1) determine single-event noise levels; (2) correlate detected noise events to aircraft operations; (3) calculate hourly, daily and annual average noise levels throughout the community; (4) provide input to the FAA's Integrated Noise Model that predicts aircraft noise in areas without noise monitoring stations; and (5) produce present-condition noise contour maps for each airport on a quarterly basis. This data also enables LAWA to forecast future noise contours. LAWA's Geographic Information System and land use database are then used to quantify the land use and population impacts within these noise contours.

On April 18, 2005, the LAWA Board of Airport Commissioners approved a three year contract with a firm to upgrade and expand the ANMMS for LAWA at LAX, ONT, and VNY. The new ANMMS, fully supported by a reliable system provider and utilizing “off-the-shelf” PC-based technology that is fully upgradeable, is necessary to sustaining a viable ANMMS, as required by State Law and our existing State Noise Variances. Additionally, the new ANMMS will meet the requirements of MM-LU-5 as part of the LAX Master Plan MMRP.

Status --→ In Progress: LAWA has executed the contract described above in June 2005 and work is in progress to upgrade and expand the existing ANMP. The project was kicked off in October of 2005 and is scheduled to be fully operational within the next 10 to 14 months.

## 6.2 Mitigation Plan 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: 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 --> Preparation of the Implementation Plan 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 recently announced the addition of FlyAway service at Union Station in downtown Los Angeles, and has tentatively identified prospective properties in the Long Beach area for the development of a new FlyAway site. LAWA continues to identify and evaluate other possible sites throughout the greater Los Angeles area. Additionally, LAWA has prepared a draft plan for MM-AQ-3, similar to the type of plan described above for other related air quality mitigation measures, and is in the process of internal review and refinement of the draft plan.

### 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 has completed the initial steps in conducting a comprehensive inventory of GSE operating at LAX. LAWA is also investigating available technology and potential technological developments regarding extremely low emission GSE. Additionally, LAWA is preparing a plan for MM-AQ-4 similar to the type of plan described above for MM-AQ-1 and MM-AQ-2.

### 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: Implementation of this measure is occurring in conjunction with implementation of the Community Benefits Agreement (CBA), which includes a requirement that the protocol for the Study (referred to in the

CBA as the *Air Quality Study*) be provided to the LAX Coalition Representative for review and comment. LAWA has submitted the draft protocols to the Coalition Representative and is awaiting comment. The Air Quality Source Apportionment Study is also required as part of the Stipulated Settlement Agreement.

#### 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 Applicable 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 --→ In Progress: LAWA is investigating the potential nature, scope, and application of this type of mobile facility, as may directly relate to LAWA's ability to obtain authorization from FAA for federal funding and/or the use of airport revenues.

### **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."

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 RFS habitat at El Toro or at a comparable site approved by the USFWS. LAWA is currently investigating a comparable site at Madrona Marsh, Torrance. 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.

Status --→ In-Progress: 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 south airfield. The RFS cyst-bearing soils collected were 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. See **Appendix E** for Sapphos Environmental Inc. Memorandum for Record "Documentation of Salvage and Storage of Riverside Fairy Shrimp Cyst-Bearing Soils in Support of the April 20, 2004 Biological Opinions for Alternative D and the April 8, 2005 Biological Opinions for Operations and Maintenance", dated August 19, 2005. See **Appendix F** for Los Angeles World Airports Environmental Management Division (Internal Report): "Monitoring Report for the Conservation of the Riverside Fairy Shrimp Cysts from the Los Angeles International Airport July 13 - August 8, 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.

Coordination with the City of Torrance for conservation efforts as it relates to the RFS is underway. A Memorandum of Understanding (MOU) for RFS habitat at Madrona Marsh between LAWA and the City of Torrance has been drafted and currently under review. Additionally, LAWA and the FAA are pursuing plans to create RFS habitat on federal lands located at the former Marine Corps Air Station El Toro.

6.3.B. MM-BC(SA)-1 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: LAWA and its consultants have initiated the preparation of the Habitat Replacement Plan for MM-BC(SA)-1. This plan will detail the strategy for LAWA to replace the habitat units prior to or concurrent with commissioning of relocated Runway 7R-25L. Monitoring requirements will also be addressed under the Habitat Replacement Plan.

6.3.C MM-BC(SA)-2 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 --→ In Progress: LAWA has a qualified wildlife biologist performing directed surveys to comply with this measure. See **Appendix G** for documentation of the survey. The results of the completed survey indicate, to date, the absence of the loggerhead shrike and the San Diego black-tailed jackrabbit. As such, relocation efforts are not anticipated to be required.

## 6.4 Hydrology and Water Quality

### 6.4.A. HWQ-1 Develop Conceptual Drainage Plan

The LAX Master Plan MMRP states in part:

***“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, 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 by 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."*

Status --→ Completed: LAWA completed a draft Conceptual Drainage Plan in 2005 and circulated it for public review and comment as part of the SAIP Draft EIR. The draft Plan was finalized in late 2005 and adopted in conjunction with approval of the SAIP. On December 15, 2005, the final Conceptual Drainage Plan was determined by the California Coastal Commission to be consistent with the California Coastal Management Program (i.e., the California Coastal Act), see **Appendix H**.

## 6.5. 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:

### 6.5.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.

### 6.5.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.”*

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 Los Angeles International Airport (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 Los Angeles International Airport, including El Segundo, Hawthorne, Inglewood, Lennox, South Los Angeles, and Westchester/Playa del Rey. In 2005, 31 local students participated in the program.

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.

Status --→ In Progress: LAWA is continually coordinating with local school districts to provide education and trade training programs for aviation-related careers.

#### 6.5.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.”***

LAWA’s Small Business Outreach and Jobs Opportunities Program provide employment and educational outreach services to local community-based organizations, and community residents. LAWA’s Small Business and Job Opportunities Division provides information regarding employment opportunities to job seekers who are interested in employment with airport tenants, surrounding airport companies and other private companies. LAWA staff assists job seekers with resume writing, interview skills and provides various resource training classes that are facilitated by our community partners. Staff also assists potential employers by providing the employer with resumes of job seekers whose skills match the needs of the employer. LAWA staff attends job fairs and career days facilitated by various community organizations and educational institutions.

In addition to the above programs, and in connection with LAX Master Plan implementation, LAWA began work to organize, staff and fund two jobs

programs, conditioned upon FAA approval of the needed expenditures, as follows:

LAX First Source Hiring Program: This program was initiated the result of negotiations between the LAX Coalition for Economic, Environmental and Educational Justice (Coalition) and LAWA that created the Community Benefits Agreement (CBA) whereby LAWA agreed to allocate funds to support the First Source Hiring Program (FSHP). The FSHP annual budget is established at approximately \$300,000. During the negotiations with the Coalition, it was determined that the Community Development Department (CDD) of the City of Los Angeles, with their extensive employment training background and existing Work Source Systems, was the appropriate agency to assist LAWA in implementing this program as well as the Jobs Training Program.

On April 18, 2005, the Board of Airport Commissioners approved the First Source Hiring Policy whereby all new contractors, for Master Plan and non-Master Plan contracts, leases and permits are required to have this Policy included in their contracts. The Policy also requires that all amended or extended existing contracts, leases and permits have this new requirement added therein. The First Source Hiring Program provides early access to targeted applicants for available LAX airport jobs. Employers will receive prompt cost-free referrals of qualified and trained applicants. This program has specific timetables and obligations spelled out. Attached in **Appendix I** is a detailed copy of the First Source Hiring And Aviation Related Training Plan.

LAX Jobs Training Program: This program will provide vital employment training services to residents in the LAX Master Plan Impact Area that includes the City of Inglewood, South Los Angeles and portions of Los Angeles County such as Lennox and West Athens areas. Since CDD is authorized to serve only City of Los Angeles residents, CDD has partnered with the South Bay Workforce Investment Board to identify potential training providers. The program includes job readiness, skill development, career ladder and incumbent worker training.

LAWA has committed to providing \$3 million annually for five years to fund this training program for LAX airport jobs, aviation-related jobs and LAX Master Plan Program constructions pre-apprenticeships. This program will be implemented through three Work Source Centers and their network of training providers. Affected residents of the project impact area who enroll at these centers will be assessed to determine their job interests, need for pre-employment services such as resume preparation, interview skills and a full assessment to determine their need for additional classroom training to increase their skills.

Status → In progress: A Memorandum of Understanding (MOU) between LAWA and the CDD is being negotiated at this time. This MOU will establish the scope, duties and responsibilities of the two City Departments as LAWA embarks on the implementation of these programs. CDD is also in the process of completing two Requests for Proposals for the Works Source Centers in the City of Los Angeles and one for the Special Needs Population. Once these centers are in place by spring of 2006, then the programs can be fully implemented.

LAWA staff continues to explore the viability of all types of job training and outreach programs and their applicability at LAWA. Regular updates on all our current, pending and future training programs will be available.

#### 6.5.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.”*

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 worked 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.

Status --> In Progress: LAWA is continually working with both the Stakeholders Liaison Office and the LAX Coalition to encourage community participation in the development of the LAX Master Plan.

### 7.0. Awards and Achievements

In 2005, LAX won the Airports Council International-North America (ACI-NA) Environmental Achievement Award in the large-airport class for constructing the first retail hydrogen-fueling and generation station at an airport. The 10,500 square foot station, opened last Oct. 22, 2005, incorporates a commercial retail-friendly design, which will pave the way for future retail outlets.

LAWA is committed to identify and replace fossil-fuel vehicles and equipment with alternative-fuel models. Currently, over 400 (or more than half) of LAX's vehicle fleet is comprised of alternative-fuel vehicles. Alternative fuels include liquefied natural gas (LNG), liquefied petroleum gas (LPG), compressed natural gas (CNG), electricity, solar power and hydrogen fuel cell. Further expansion of the program is planned.

### 8.0. Summary

To date, all applicable mitigation measures adopted for the LAX Master Plan MMRP on September 2004 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 and construction for the SAIP is scheduled to start in March 2006. 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)**

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## 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		
<b><i>Relocation of Residences and Businesses</i></b>				
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		
<b><i>Environmental Justice</i></b>				
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
<b><i>Air Quality</i></b>				
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
<b><i>Hydrology and Water Quality</i></b>				
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
<b><i>Historical/Architectural and Archaeological/Cultural Resources</i></b>				
HR-1	Preservation of Historic Resources. (ref . page no. 55)	X		

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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 <sup>th</sup> , 2005, page A-6)		X	
<b><i>Paleontological Resources</i></b>				
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
<b><i>Biotic Communities</i></b>				
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	
<b><i>Endangered and Threatened Species</i></b>				
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	
<b><i>Energy Supply</i></b>				
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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<b><i>Light Emissions</i></b>				
LI-2	Use of Non-Glare Generating Building Materials. (ref . page no. 91)	X		
LI-3	Lighting Controls. (ref . page no. 91)	X		
<b><i>Solid Waste</i></b>				
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		
<b><i>Construction Impacts</i></b>				
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
<b><i>Design, Art, and Architecture Applications/Aesthetics</i></b>				
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
<b><i>Hazardous Materials</i></b>				
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
<b><i>Water Use</i></b>				
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
<b><i>Wastewater</i></b>				
MM-WW-1	Provide Additional Wastewater Treatment Capacity to Accommodate Cumulative Flows. (ref . page no. 102)	X		
<b><i>Fire Protection</i></b>				
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		
<b><i>Law Enforcement</i></b>				
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>					
<b>MM-HA-11</b>  <b>Monitoring Agency:</b>	<b>Navigational Aids Relocation and Improvements.</b> 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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	<p>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.</p>				
<i>Environmental Justice</i>					
<p><b>MM-EJ-1</b>  <b>Monitoring Agency:</b></p>	<p><b>Expedite Residential Soundproofing for Qualifying Property Owners.</b> 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.</p>	<p>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.</p>	<p>Prior to commencing operations on the new (relocated) runway.</p>	<p>Once</p>	<p>Confirm notification of eligibility for soundproofing to residences that would be newly exposed to 65 CNEL due to runway relocation.</p>

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<i>Land Use</i>					
<b>MM-LU-3</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn.</b> 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
<b>MM-LU-4</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise.</b> 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>					
<b>HWQ-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<p><b>Conceptual Drainage Plan.</b> 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"> <li>◆ Decreasing impervious area by removing unnecessary pavement or utilizing porous concrete or modular pavement</li> <li>◆ Building storm water detention structures</li> <li>◆ Diverting runoff to pervious areas (reducing directly-connected impervious areas)</li> <li>◆ Diverting runoff to outfalls with additional capacity (reducing the total drainage area for an individual outfall)</li> <li>◆ Redirecting storm water flows to increase the time of concentration</li> </ul> <p>Measures to increase drainage capacity could include:</p> <ul style="list-style-type: none"> <li>◆ Increasing the size and slope (capacity) of storm water conveyance structures (pipes, culverts, channels, etc.).</li> <li>◆ Increasing the number of storm water conveyance structures and/or outfalls.</li> </ul> <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"> <li>◆ Vegetated swales and strips</li> <li>◆ Oil/Water separators</li> <li>◆ Clarifiers</li> <li>◆ Media filtration</li> <li>◆ Catch basin inserts and screens</li> <li>◆ Continuous flow deflective systems</li> <li>◆ Bioretention and infiltration</li> <li>◆ Detention basins</li> <li>◆ Manufactured treatment units</li> <li>◆ Hydrodynamic devices</li> </ul> <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><b>MM-BC-1</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area.</b> 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.				
<b>MM-BC-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Floral Resources: Lewis' Evening Primrose.</b> 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
<b>MM-BC-9</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Faunal Resources.</b> 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

**LAX MASTER PLAN ALTERNATIVE 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>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>		

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

<b>Master Plan Commitments/ Mitigation Measures</b>	<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
<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>				

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

	<b>Master Plan Commitments/ Mitigation Measures</b>	<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
	<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><b>MM-BC-13</b></p> <p><b>Monitoring Agency:</b></p> <p><b>LAWA</b></p>	<p><b>Replacement of State-Designated Sensitive Habitats.</b> 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>

**LAX MASTER PLAN ALTERNATIVE 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>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 Fore-dune restoration efforts consist of site preparation, propagation, and planting of the species characteristic of the Southern Fore-dune 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		

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

<b>Master Plan Commitments/ Mitigation Measures</b>		<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
	<p>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.</p>				
<p><b>MM-ET-4</b>  <b>Monitoring Agency:</b>  <b>LAWA</b></p>	<p><b>El Segundo Blue Butterfly Conservation: Habitat Restoration.</b> 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</p>	<p>Loss of habitat occupied by endangered El Segundo blue butterfly</p>	<p>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</p>	<p>As per Habitat Restoration Plan for the El Segundo Blue Butterfly</p>	<p>Preparation of Habitat Restoration Plan for El Segundo Blue Butterfly; Periodic Monitoring Report</p>

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

<b>Master Plan Commitments/ Mitigation Measures</b>	<b>Potential Impact Being Addressed</b>	<b>Timing of Implementation</b>	<b>Monitoring Frequency</b>	<b>Actions Indication Compliance</b>
<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		
<b>Surface Transportation (Off-Airport)</b>						
<b>MM-ST-6 Monitoring Agency: LAWA</b>	<b>Add New Traffic Lanes.</b> 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 <sup>th</sup> 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 <sup>th</sup> St/80 <sup>th</sup> 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	
<b>MM-ST-7 Monitoring Agency: LAWA</b>	<b>Restripe Existing Facilities.</b> 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	
<b>Surface Transportation (Off-Airport)</b>					
<b>MM-ST-8 Monitoring Agency: LAWA</b>	<b>Add ATSAC, ATCS or Equivalent.</b> 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 <sup>rd</sup> 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
<b>MM-ST-10 Monitoring Agency: LAWA</b>	<b>Modify Signal Phasing.</b> 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		
<b>Surface Transportation (Off-Airport)</b>						
	Boulevard, Imperial Highway & Vista del Mar.					
<b>MM-ST-15 Monitoring Agency: LAWA MM-ST-15 (continued)</b>	<b>Provide Fair-Share Contributions to Transit Improvements.</b> 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	
<b>MM-ST-16 Monitoring Agency: LAWA</b>	<b>Provide Fair-Share Contribution to LA County's Project to Extend the Marina Expressway.</b> 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 MEASURES<sup>1</sup>**

Master Plan Commitments/ Mitigation Measures	Potential Impact Being Addressed	Timing of Implementation	Monitoring Frequency	Actions Indicating Compliance	
<i>Biotic Communities</i>					
<b>MM-BC (SA)-1</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Replacement of Habitat Units Associated with the South Airfield Improvement Project.</b> 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
<b>MM-BC (SA)-2</b>  <b>Monitoring Agency:</b>  <b>LAWA</b>	<b>Conservation of Faunal Resources Associated with the South Airfield Improvement Project.</b> 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

<sup>1</sup> 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 2005**

**LAX Master Plan Mitigation Measures and Reporting Program (MMRP)  
Program Plan Status Update  
March, 2006**

No.	Program Plan Title	Program Plan Description	Master Plan Commitments/Mitigation Measures Addressed	Status (as of March, 2006)
1	<b>Aircraft Noise Abatement Program (ANAP) (existing)</b>	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	<b>Aircraft Noise Mitigation Program (ANMP) (existing)</b>	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	In Progress: Existing program in place with periodic report updates to the County of Los Angeles.
3	<b>Master Plan for Air Quality (MPAQ)</b>	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: Draft plan completed in January 2006 and currently under internal review.  MM-AQ-4: Draft plan completed in January 2006 and currently under internal review.
4	<b>Ground Transportation Outreach Program (GTOP)</b>	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: Draft Ground Transportation Outreach Program circulated for LAWA internal review.
5	<b>Construction Transportation Management Plan (CTMP)</b>	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	<b>Archaeological Treatment Plan (ATP)</b>	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	In Progress: Received and incorporated FAA comments. FAA has sent the final plan to outside agencies such as SHPO, National Park Service, and other applicable parties for review. Pending FAA final approval of plan.

No.	Program Plan Title	Program Plan Description	Master Plan Commitments/Mitigation Measures Addressed	Status (as of March, 2006)
7	<b>Paleontological Management Treatment Plan (PMTP)</b>	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	<b>Conceptual Drainage Plan (CDP)</b>	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	<b>Procedures for Handling of Contaminated Materials during Construction</b>	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	<b>SAIP Habitat Replacement Plan (HRP)</b>	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: EMD proceeding with the development of the Habitat Replacement Plan applicable to the SAIP.
11	<b>Utilities Relocation Program (URP)</b>	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 Program completed in May 2005.
12	<b>Street Frontage &amp; Landscape Development Plan (SFLDP) (Existing)</b>	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-1 and 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: It was determined that this plan may be required in the future. The Water Conservation Plan was discussed to be an appendix to the SFLDP. LAWA EMD is currently investigating funding and how to incorporate into the SFLDP. A note to file was developed to document W-2 as not applicable to implement for the SAIP.
14	Landscape Maintenance Program (LMP)	Not yet completed.	LU-2: Establishment of an LMP for parcels acquired due to airport expansion DA-1: Provide and maintain airport buffer areas	In Progress: LAWA currently integrating existing plans or existing procedures under Relocation Assistance Division (RAD) that will form the basis of the LMP. <b>Not triggered by the SAIP.</b>
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.	RBR-1: Residential and Business Relocation Program MM-RBR-1: Planning for business relocation MM-RBR-2: Relocation opportunities through ANMP	In Progress: Draft Relocation Plan approved by the BOAC in Dec 2004. Final Relocation Plan is currently being developed. <b>Not triggered by the SAIP</b>
16	Fire & Police Facility Program (FPFP)	Not yet developed.	PS-1: Fire and Police Facility Relocation Plan PS-2: Fire and Police Facility space and siting requirements	Not applicable at this time: <b>Not triggered by the SAIP.</b> First project that may trigger this program plan is the RAC.
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	Not applicable at this time: <b>Not triggered by the SAIP.</b>

## **APPENDIX D**

### **SAIP Applicable Mitigation Measures Status Summary**

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
												Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
<b>NOISE</b>												
N-1	N-1 - Maintenance of Applicable Elements of Existing Aircraft Noise Abatement Program.	ANAP					1. Submission of Annual Report per Variance Conditions to County of Los Angeles			X		NMD submitted annual report per variance for 2005
MM-N-4	MM-N-4 - Update the Aircraft Noise Abatement Program Elements as Applicable to Adapt to the Future Airfield Configuration.	ANAP					Not Required at this time.				X	Per LAWA Noise Management Division
MM-N-5	MM-N-5 - Conduct Part 161 Study to Make Over-Ocean Procedures Mandatory.				X		1. Board approved study on 3/21/05; 2. Notice To Proceed on June 8th, 2005.		X			Study ongoing
MM-N-7	<b>MM-N-7 - Construction Noise Control Plan.</b>	CNCP	X				1. Place requirement of Contractor to develop project specific construction noise control plan.	X				Incorporated into SAIP contract specifications Section 21. Review and approve the contractor's CNCP by Construction Managers, EPMD & OQC. Enforce, monitor and report the plan's requirements during construction by EPMD/CM.
MM-N-8	<b>MM-N-8 - Construction Staging.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21.
MM-N-9	<b>MM-N-9 - Equipment Replacement.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21
MM-N-10	<b>MM-N-10 - Construction Scheduling.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21
<b>LAND USE</b>												

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
											Q	
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
MM-LU-1	MM-LU-1 – Implement Revised Aircraft Noise Mitigation Program.	ANMP					1. Submit annual updates to County of LA			X		Existing program in place with periodic report updates to County of LA. Confirmed with NMD/Scott Tatro (4/5/05 email) this is already in place and in compliance
MM-LU-2	MM-LU-2 - Incorporate Residential Dwelling Units Exposed to Single Event Awakenings Threshold into Aircraft Noise Mitigation Program.	ANMP					1. NMD currently developing methodology in house to produce single event contours. Contours will be updated annually and transfer into a database that will give the Soundproofing Group the number and the exact location of the affected properties. 2. Soundproofing will then gain Board approval to amend the current program accordingly.		X			In progress
MM-LU-3	MM-LU-3 - Conduct Study of the Relationship Between Aircraft Noise Levels and the Ability of Children to Learn.				X		1. Draft scope of services completed. 2. Consult with the Coalition. 3. Issue an RFP to perform the study.		X			In consultation with the Coalition at this time
MM-LU-4	MM-LU-4 - Provide Additional Sound Insulation for Schools Shown by MM-LU-3 to be Significantly Impacted by Aircraft Noise.				X		Pending the outcome of MM-LU-3				X	Pending the results of the study under MM-LU-3
MM-LU-5	MM-LU-5 - Upgrade and Expand Noise Monitoring Program.	ANMP					1. Board approved the upgrade on 4/18/2005		X			In progress
<b>SURFACE TRANSPORTATION (ON-AIRPORT)</b>												
<b>SURFACE TRANSPORTATION (OFF-AIRPORT)</b>												
ST-9	<b>ST-9 - Construction Deliveries.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Also addressed in the Contractor's Construction Traffic Management Plan
ST-12	<b>ST-12 - Designated Truck Delivery Hours.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Also addressed in the Contractor's Construction Traffic Management Plan
ST-14	<b>ST-14 - Construction Employee Shift Hours.</b>		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Also addressed in the Contractor's Construction Traffic Management Plan

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
												Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
ST-16	ST-16 - Designated Haul Routes.		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Also addressed in the Contractor's Construction Traffic Management Plan
ST-17	ST-17 - Maintenance of Haul Routes.		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Also addressed in the Contractor's Construction Traffic Management Plan
ST-18	ST-18 - Construction Traffic Management Plan.	CTMP					1. Develop the CTMP. 2. Approval by Office of Quality and Compliance (OQC) 3. Place requirement for Contractor to develop a project specific CTMP	X				Final draft CTMP dated May 2005. EPMD/OQC/Construction Managers to review and approve the Contractor's CTMP and monitor and report on the implementation of that plan.
ST-21	ST-21 - Construction Employee Parking Locations.		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 .
ST-22	ST-22 - Designated Truck Routes.		X				1. Place requirement into project contract specifications for the Contractor.	X				Reference SAIP contract specifications Section 21 . Should also be addressed in the Contractor's Construction Traffic Management Plan
<b>RELOCATION OF RESIDENCES AND BUSINESS</b>												
<b>ENVIRONMENTAL JUSTICE</b>												
EJ-1	EJ-1 Aviation Curriculum	X							X			Currently being coordinated by the LAX Jobs Program
EJ-2	EJ-2 Aviation Academy	X							X			Currently being coordinated by the LAX Jobs Program
EJ-3	EJ-3 Job Outreach Center	X							X			Currently being coordinated by the LAX Jobs Program
EJ-4	EJ-4 Community Mitigation Monitoring	X							X			Currently being coordinated by the LAX Jobs Program and the Stakeholders Liaison
<b>AIR QUALITY</b>												
AQ-1	AQ-1 - Air Quality Source Apportionment Study				X		1. Draft Scope of Services. 2. Consult with the Coalition for input. 3. Issue RFP.		X			In consultation with the Coalition
AQ-2	AQ-2 - School Air Filters				X		1. Pending results of the AQ-1 study				X	Based upon the conclusions and recommendations of AQ-1 Air Quality Source Apportionment Study, LAWA shall provide funding for air filtration at qualifying public schools with air conditioning systems in place.

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
												Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
AQ-3	AQ-3 - Mobile Health Research Lab				X		1. Initiate efforts to seek funding/co-fund, to the extent feasible, for a study to measure and investigate upper respiratory system and hearing loss impacts due the LAX MP. 2. Initiate consultation with the Coalition. 3. Develop draft scope of services. 4. Issue RFP.		X			In Progress
MM-AQ-1	MM-AQ-1 - LAX Master Plan - Air Quality Mitigation Plan for Air Quality.	MPAQ					1. Drafted Master Plan for Air Quality. 2. Consult with regulatory agencies. 3. Finalize Plan. 4. Formal approval by LAWA.OQC	X				Final Draft completed in October 2005 and adopted by LA City Council on January 11, 2006
MM-AQ-2	<b>MM-AQ-2 - Construction-Related Mitigation Measure.</b>	MPAQ	X				1. Drafted Construction related measures implementation plan within MPAQ. 2. Formal approval by LAWA Office of Quality and Compliance (OQC). 3. Implement construction measures into contract specifications.	X				Final Draft completed in October 2005 and adopted by LA City Council on January 11, 2006. Incorporated applicable provisions into the SAIP.
MM-AQ-3	MM-AQ-3 - Transportation-Related Mitigation Measures.	MPAQ					1. Draft Implementation Plan within the MPAQ. 2. Formal approval by LAWA OQC.		X			Draft Plan is in progress and under internal review
MM-AQ-4	MM-AQ-4 - Operations-related mitigation measures.	MPAQ					1. Draft Implementation Plan within the MPAQ. 2. Formal approval by LAWA OQC.		X			Draft Plan is in progress and under internal review
<b>HYDROLOGY AND WATER QUALITY</b>												

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
												Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
HWQ-1	HWQ-1 – Develop Detailed Drainage Plan.	CDP				1. Final Conceptual Drainage Plan Developed. 2. Consultation with Coastal Commission.		X				Final consistency certification on Dec 15, 2005
MM-HWQ-1	MM-HWQ-1: Update Regional Drainage Facilities.				X	1. Prepare status report on SAIP impacts to regional drainage facilities. 2. Transmit and notify effected jurisdictions (County of LA, City Departments).		X				In coordination with the County of LA. Proposed actions to further study the impact from the SAIP to the County system. A report will be developed to explain impacts, if any, resulting from the study. If impacts identified, will coordinate with the County to mitigate the impact.
<b>HISTORICAL/ARCHITECTURAL AND ARCHAEOLOGICAL/CULTURAL RESOURCES</b>												
MM-HA-4	<b>MM-HA-4 – Archaeological Discovery.</b>	ATP				1. Drafted Archaeological Treatment Plan (ATP). 2. Consultation with FAA and other agencies. 3. Formal approval from LAWA OQC. 4. Implement during construction	X					Currently in consultation with FAA. Applicable provisions have been incorporated into project specifications
MM-HA-5	MM-HA-5 - Archaeological Monitoring.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-6	MM-HA-6 -Excavation and Recovery.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-7	MM-HA-7 - Administration.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-8	MM-HA-8 - Archaeological/Cultural Monitor Report.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-9	MM-HA-9 - Artifact Curation.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-10	MM-HA-10 - Archaeological Notification.	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
MM-HA-11	MM-HA-11 Navigational Aids Relocation and Improvements	ATP				Implement in accordance to the approved ATP		X				Status same as part of MM-HA-4
<b>PALEONTOLOGICAL RESOURCES</b>												
MM-PA-1	<b>MM-PA-1 – Paleontological Qualification and Treatment Plan.</b>	PMTP				1. Drafted Paleontological Management Treatment Plan (PMTP). 2. Formal approval from LAWA OQC. 3. Implement into contract specifications		X				Final Draft PMTP dated December 2005. Final PMTP was sent to the Vertebrate Section of the LA County Museum for review. Applicable provisions have been incorporated into project specifications.
MM-PA-2	MM-PA-2 - Paleontological Authorization.	PMTP				Implement in accordance to the PMTP		X				Status same as part of MM-PA-1

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
Q												
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
MM-PA-3	MM-PA-3 - Paleontological Monitoring Specifications.	PMTP					Implement in accordance to the PMTP		X			Status same as part of MM-PA-1
MM-PA-4	MM-PA-4 -Paleontological Resources Collection.	PMTP					Implement in accordance to the PMTP		X			Status same as part of MM-PA-1
MM-PA-5	MM-PA-5 - Fossil Preparation.	PMTP					Implement in accordance to the PMTP		X			Status same as part of MM-PA-1
MM-PA-6	MM-PA-6 - Fossil Donation.	PMTP					Implement in accordance to the PMTP		X			Status same as part of MM-PA-1
MM-PA-7	MM-PA-7 - Paleontological Reporting.	PMTP					Implement in accordance to the PMTP		X			Status same as part of MM-PA-1
<b>BIOTIC COMMUNITIES</b>												
MM-BC-1	MM-BC-1 - Conservation of State-Designated Sensitive Habitat Within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area.		X								X	Not required at this time. The SAIP impacts are not within 2000' of sensitive habitat areas as specified within the measure.
MM-BC-8	MM-BC-8 - Replacement of Habitat Units.	HRP					1. Develop the HRP. 2. Implement the HRP prior to or concurrent with the SAIP		X			The HRP will address the requirements to replace 17.2 habitat units (vegetation) at El Toro or another appropriate site. HRP is currently in the process of being developed.
MM-BC(SA)-1	Replacement of Habitat Units Associated with the South Airfield Improvement Project					X	1. Implement in accordance to the HRP		X			Status same as MM-BC-8
MM-BC-9	MM-BC-9 - Conservation of Faunal Resources.					X	1. Perform Directed surveys for the San Diego Black-Tailed Jackrabbit and the Loggerhead Shrike. 2. Document findings, if found, implement relocation efforts	X				LAWA performed directed surveys near SAIP impacted areas. See February 6, 2006 report by USDA Wildlife Services. Subject species surveys have been completed and found that subject species do not occur at SAIP site; hence no relocation is required.
MM-BC(SA)-2	Conservation of Faunal Resources Associated with the South Airfield Improvement Project					X	Implement according to MM-BC-9	X				Status same as MM-BC-9
<b>ENDANGERED AND THREATENED SPECIES OF FLORA AND FAUNA</b>												
MM-ET-3	MM-ET-3 - El Segundo Blue Butterfly Conservation: Dust Control.		X				1. Implemented into Contract Specifications	X				Dust control measures included in the Contract specifications
<b>ENERGY SUPPLY</b>												

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
Q												
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
E-2	E-2 – Coordination with Utility Providers.			X			1. Coordination with utility providers during Design. 2. Submittal of utility plans to affected companies.	X				Coordination with Utility providers completed during design phase
PU-1	PU-1 – Develop a Utility Relocation Program.	URP					1. Develop program plan "Utilities Relocation Plan" - a general framework. 2. LAWA OQC approve Utilities Relocation Plan.	X				Utilities Relocation Program issued by URS/MARRS on 4/2005.
<b>LIGHT EMISSIONS</b>												
<b>SOLID WASTE</b>												
SW-2	SW-2 - Requirements for the Use of Recycled Materials During Construction.		X				Implemented into Contract Specifications	X				Included in SAIP contract specifications
SW-3	SW-3 - Requirements for the Recycling of Construction and Demolition Waste.		X				Implemented into Contract Specifications	X				Included in SAIP contract specifications
<b>CONSTRUCTION IMPACTS</b>												
C-1	C-1 – Establishment of a Ground Transportation/Construction Coordination Office	GTOP					1. Designated the construction coordination office and its functions. 2. Provided within the contract specifications.	X				Included in SAIP contract specifications
C-2	C-2 - Construction Personnel Airport Orientation.		X				1. Implemented into Contract specifications as a Contractor requirement	X				Included in SAIP contract specifications
<b>DESIGN, ART, ARCHITECTURE/AESTHETICS</b>												
DA-1	DA-1 - Provide and Maintain Airport Buffer Area.					X	1. Assess feasibility to incorporate into SAIP. 2. If not feasible, draft note to file				X	See memo-to file (memo from CDM to LAWA dated December 25, 2005) discussing the feasibility of this measure as it applies to the SAIP.
MM-DA-1	MM-DA-1 - Construction Fencing.					X	1. Assess feasibility to incorporate into SAIP. 2. If not feasible, draft note to file				X	See memo-to file (memo from CDM to LAWA dated December 25, 2005) discussing the feasibility of this measure as it applies to the SAIP.

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS

SOUTH AIRFIELD		Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
		Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
												Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>												
<b>HAZARDOUS MATERIALS</b>												
HM-1	HM-1 – Ensure Continued Implementation of Existing Remediation Efforts.					X	1. Assess compatibility to the remediation efforts for Continental project. 2. Preparation of the construction compatibility assessment. 3. If remediation will be disrupted by construction, approval of the assessment/plan will require necessary approvals from RWQCB, DTSC, and LAFD, as appropriate				X	There are no compatibility issues with the remediation efforts for Continental and the SAIP.
HM-2	<b>HM-2 – Handling of Contaminated Materials Encountered During Construction.</b>	HAZMAT					1. Implement into Construction Contract Specifications	X				Procedures for the Handling of Contaminated Materials Encountered During Construction issued December 2005 and incorporated into the SAIP project construction specifications.
<b>WATER USE</b>												
W-1	W-1 - Maximize Use of Reclaimed Water.			X			Implemented into Contract Specifications	X				Included as part of the SAIP contract specification as applicable.
W-2	W-2 - Enhance Existing Water Conservation Program.	SFLDP					1. Assess whether SAIP has elements of the project that may address water conservation. If not, a note to file will be developed to document why this measure is not applicable.				X	A memo-to-file provides clarification that this measure is not applicable to SAIP.
<b>WASTEWATER</b>												
<b>FIRE PROTECTION</b>												
FP-1	FP-1 - LAFD Design Recommendations.			X			Submitted plans to LAFD for review	X				Completed during design phase
<b>LAW ENFORCEMENT</b>												
<b>KEY:</b>												
<b>Reviewing Authority</b> BOAC - Board of Airport Commissioners Caltrans County of Los Angeles FAA - Federal Aviation Administration National Park Service LAWA - Los Angeles World Airports Los Angeles Agency Departments						<b>Program Plans:</b> ANAP Aircraft Noise Abatement Program (existing) ANMP Aircraft Noise Mitigation Program (existing) ATP Archaeological Treatment Plan CDP Conceptual Drainage Plan CTMP Construction Traffic Management Plan FPFP Fire & Police Facility Program GTOP Ground Transportation Outreach Program HRP Habitat Replacement Plan HZMAT Procedure for the Management of Contaminated Materials Encountered During Construction						
<b>Responsible Party</b>												

**SOUTH AIRFIELD IMPROVEMENT PROJECT**  
**LAX MASTER PLAN -- MITIGATION MONITORING REQUIREMENTS**

SOUTH AIRFIELD	Compliance Strategy					Implementation Procedures (Action Items)	STATUS				Status (as of Mar 2006)/Comments
	Program Plans or Program Requirements	Construction specifications	Design Requirements	"Stand-Alone" Plans	Project Specific Requirements		Completed	In Progress	Existing Operations	Not required at this time	
											Q
<b>MASTER PLAN COMMITMENTS / MITIGATION MEASURES</b>											
CM - Construction Management EMD - Environmental Management Division EPMD - Engineering Project Management Division GT - Ground Transportation LRP - Long Range Planning OPS - LAX Operations OQC - Office of Quality and Compliance TBD - To Be Determined CCO - Construction Coordination Office	MPAQ SFLDP URP	Master Plan for Air Quality Street Frontage Landscape Development Plan Utilities Relocation Plan									

## **APPENDIX E**

**Sapphos Environmental Inc. Memorandum for Record  
"Documentation of Salvage and Storage of Riverside  
Fairy Shrimp Cyst-Bearing Soils in Support of the April  
20, 2004 Biological Opinions for Alternative D and the  
April 8, 2005 Biological Opinions for Operations and  
Maintenance", dated August 19, 2005.**

August 19, 2005  
Job Number: 1299-006  
LAX Riverside Fairy Shrimp Mitigation

**MEMORANDUM FOR THE RECORD**

2.6 1299-006.M05

**TO:** Los Angeles World Airports  
(Ms. Patricia Tubert, Ms. Barbara Martinoff  
and Dr. Andrew Huang)

Federal Aviation Administration  
(Mr. Dave Kessler)

CTL Services  
(Mr. Steve Morrill)

**FROM:** Sapphos Environmental, Inc.  
(Mr. Sean Bergquist and Mr. Ian Wren)

**SUBJECT:** Documentation of Salvage and Storage of Riverside Fairy  
Shrimp Cyst-Bearing Soils in Support of the April 20, 2004  
Biological Opinion for Alternative D and the April 8, 2005  
Biological Opinions for Operations and Maintenance

**ATTACHMENT:** A. Riverside Fairy Shrimp Sampling Areas  
B. Riverside Fairy Shrimp Salvage and Storage Photos

**EXECUTIVE SUMMARY**

This Memorandum for the Record (MFR) documents the salvage and storage of Riverside fairy shrimp (*Streptocephalus woottoni*) (RFS) cyst-bearing soils formerly located at Los Angeles International Airport (LAX) in support of Biological Opinions issued by the U.S. Fish and Wild Life Service (USFWS) on April 20, 2004 and April 8, 2005. These results are being provided to Los Angeles World Airports (LAWA) and the Federal Aviation Administration (FAA) to ensure the appropriate measures were taken to comply with the April 20, 2004 and April 8, 2005 Biological Opinions for Alternative D and Operations and Maintenance, respectively. This MFR documents the results of the field efforts conducted between July 13, 2005 and August 10, 2005 to salvage Riverside fairy shrimp cyst-bearing soils and the subsequent storage of these soils. A total of approximately 1800 cubic feet of cyst-bearing soils were salvaged from the LAX airfield and stored at a USFWS-approved facility.

• **Corporate Office:**  
133 Martin Alley  
Pasadena, CA 91105  
**Tel** (626) 683-3547  
**Fax** (626) 683-3548

• **Santa Monica Regional Office:**  
1351 4th Street  
Santa Monica, CA 90401  
**Tel** (310) 260-1520  
**Fax** (310) 260-1521

• **Billing Address:**  
P.O. Box 50241  
Pasadena, CA 91115

• **Email:**  
sapphos@pacbell.net

## **INTRODUCTION**

On April 20, 2004 the Carlsbad Fish and Wildlife Office (CFWO) of the U.S. Fish and Wildlife Service (USFWS) issued the Federal Aviation Administration (FAA) a nonjeopardy biological opinion based on their review of the proposed activities pursuant to Alternative D of the Los Angeles International Airport (LAX) Master Plan and its effects on the RFS. Additionally, on April 8, 2005 the CFWO issued the FAA a nonjeopardy biological opinion based on their review of the proposed operations and maintenance activities for LAX and its effects on the RFS. Review of the proposed action was conducted by the CFWO in accordance with Section 7 of the federal Endangered Species Act of 1973, as amended.<sup>1</sup>

Conservation Measures 5 and 9 of the April 20, 2004 Biological Opinion and Conservation Measure 8 of the April 8, 2005 Biological Opinion identify the methods of salvage and storage of RFS cyst-bearing soils currently located at LAX. The methodology found in this MFR mirrors that found in the Biological Opinions with the exception of the salvage methodology for one of the ephemerally wetted areas, EW-014, as well as the storage conditions for cyst-bearing soils collected from LAX. Conservation Measure 9 of the April 8, 2004 Biological Opinion for Alternative D includes the methodology for salvage and storage of RFS cyst-bearing soils within pools EW001, EW002, and EW006. Conservation Measure 8 of the April 20, 2005 Biological Opinion for Operations and Maintenance identifies the requirement that LAWA

*“make all reasonable efforts to collect all cysts (cyst-bearing soil) from the entire pool surface of EW009, EW012, EW013, EW014, EW015, and EW016... Cysts will be stored at the San Diego Zoological Society, where all soils will be the responsibility of the CFWO. All costs associated with storage of the cysts at the San Diego Zoological Society will be the responsibility of LAWA.”*

Given the low cyst densities recorded from EW-014, which constitutes the majority of the area from which soils were collected, the FAA asked the CFWO to reconsider the collection of all soils within EW014. In addition, the CFWO was asked to reexamine the component of the conservation measure that calls for storage of cyst-bearing soils at the San Diego Zoological Society out of cost considerations.<sup>2</sup> The CFWO has reexamined these aspects of the conservation measures found in the Biological Opinions for Alternative D and Operations and Maintenance. The sections that follow reflect their input.<sup>3</sup>

## **METHODS**

During the dry season, fairy shrimp populations in vernal pools exist entirely of dormant cysts.<sup>4</sup> The preservation of fairy shrimp populations may be possible by the collection of soils containing viable cysts and relocation of these soils to appropriate habitat.<sup>5</sup> Sapphos Environmental, Inc. has made all

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<sup>1</sup> U.S. Government Printing Office. 2003. U.S. Code, Title 16, Chapter 35, Section 1531 et seq.: “Endangered Species Act.” Available at: [http://www.access.gpo.gov/uscode/title16/chapter35\\_.html](http://www.access.gpo.gov/uscode/title16/chapter35_.html).

<sup>2</sup> Federal Aviation Administration. 1 July, 2005. Letter to the U.S. Fish and Wildlife Service, Biological Services, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92009.

<sup>3</sup> Bianchi, Mike. Personal Communication. 11 July 2005. Contact: U.S. Fish and Wildlife Service, Biological Services, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92009

<sup>4</sup> Withman, C.W., Bauder, E.T., Denton, D., Ferren Jr., W.R., Ornduff, R. 1998. *Ecology, Conservation, and Management of Vernal Pool Ecosystems – Proceedings from a 1996 Conference*. California Native Plant Society, Sacramento, CA. 147-150.

<sup>5</sup> Withman, C.W., Bauder, E.T., Denton, D., Ferren Jr., W.R., Ornduff, R. 1998. *Ecology, Conservation, and Management of Vernal Pool Ecosystems – Proceedings from a 1996 Conference*. California Native Plant Society, Sacramento, CA. 190-

reasonable efforts to collect all cysts (cyst-bearing soil) from the pool surface area (EW001, EW002, EW006, EW009, EW012, EW013, EW014, EW015 and EW016) under dry season conditions. However, it is expected that a small number of undetected individual cysts remain in the soil. This expectation is consistent with the April 20, 2004 Biological Opinion for Alternative D as well as the April 8, 2005 Biological Opinion for Operations and Maintenance.

### **Field Assessment**

On July 13 and 14, 2005, between the hours of 8:00 a.m. and 3:30 p.m., two (2) Sapphos Environmental, Inc. biologists conducted a field assessment of EW001, EW002, EW006, EW009, EW012, EW013, EW014, EW015, and EW016. The assessment included the utilization of geographic information system (GIS) maps to identify the location of the pools (Attachment A, *Riverside Fairy Shrimp Sampling Areas*). The entire pool surface area was identified for all pools with the exception of EW014, for which the 81-foot elevation level served as the perimeter. This level was determined using a global positioning system (GPS) and topographic maps provided by LAWA. The perimeter of all pools were delineated, staked out, and marked with string. Within the pools, grids were mapped on site using a Trimble GPS unit. Each plot was delineated and identified by a flag labeled with the number corresponding to the mapped grid.

### **Salvage of RFS Cyst-Bearing Soils**

Soils were collected when it was sufficiently dry to avoid damaging cysts, which are fragile when wet. Tools approved by the CFWO, which includes spades, flat head shovels, and similar hand tools,<sup>6</sup> were used to collect the top 3–5 centimeters of pool sediment. Whenever possible, soil samples were collected in chunks.<sup>7</sup>

Soils collected from each grid were placed in containers corresponding to their respective grid, labeled, and stored according to location within an individual pool. Soils collected from EW-001, EW-002, and EW-006, the subject of the April 20, 2004 Biological Opinion, were isolated from those collected from EW009, EW012, EW013, EW014, EW015 and EW016, the subject of the April 8, 2005 Biological Opinion, as they require alternative modes of distribution following their salvage and storage.

A six-person field crew was on site from July 18 to 22, 2005 and July 25 to 28, 2005 between the hours of 8:00am and 5:00pm. This crew was supervised at all times by two (2) Sapphos Environmental, Inc. biologists. The entire crew, including Sapphos Environmental, Inc. biologists, was supervised and escorted by members of LAWA's Environmental Management Division in compliance with LAX security measures. Mr. Mike Bianchi of the CFWO inspected and approved the RFS-cyst salvage efforts at LAX on August 2, 2005. Soil samples were stored on site and moved to a USFWS-approved storage facility on August 3 to 4, 2005, and August 8, 2005 by a four-person field crew using a 22-foot commercial truck. Sapphos Environmental, Inc. biologists conducted a final review of RFS-cyst salvage efforts at EW001, EW002, EW006, EW009, EW012, EW013, EW014, EW015, and EW016 on August 10, 2005; stakes, string, flagging, and all other equipment and materials were removed at this time. A total of approximately 1800 cubic feet of soil was salvaged from EW001, EW002, EW006, EW009,

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194.

<sup>6</sup> Bianchi, Mike. Personal Communication. 11 July 2005. Contact: U.S. Fish and Wildlife Service, Biological Services, Carlsbad Fish and Wildlife Office, 6010 Hidden Valley Road, Carlsbad, CA 92009

<sup>7</sup> U.S. Fish and Wildlife Service. *Interim Survey Guidelines to Permittees for Scientific Take Permit under Section 10(a)(1)(A) of the Endangered Species Act for the Endangered Conservancy Fairy Shrimp, Longhorn Fairy Shrimp, Riverside Fairy Shrimp, and Threatened Vernal Pool Fairy Shrimp*. Sacramento, CA.

EW012, EW013, EW014, EW015, and EW016. Photo documentation of salvage of RFS cyst-bearing soils is provided in *Attachment B, Riverside Fairy Shrimp Salvage and Storage Photos*.

### ***Storage Conditions***

Soils were stored according to pool and grid designation to allow for the simplified retrieval of desired soils for later use in conservation efforts. Stored soils are the property of the CFWO with the distribution of all cyst-bearing soils remaining at the discretion of the CFWO. All costs associated with the storage of cyst-bearing soil collected from LAX are the responsibility of LAWA. It is the intent of the CFWO to facilitate the use of RFS cyst-bearing soils in conservation efforts as soon as possible. However, storage of fairy shrimp cysts at room temperature may be required for 25 years, which is the duration of the monitoring period.<sup>8</sup>

Soils collected at LAX were stored in a climate-controlled facility owned and operated by Public Storage, Inc. The storage facility is located at 12681 West Jefferson Boulevard, Los Angeles, California 90066. This facility is secured and monitored by video cameras 24 hours a day. The facility's climate control system maintains a temperature range of 72 to 75 degrees Fahrenheit. Mr. Mike Bianchi of the CFWO inspected and approved the RFS-cyst storage facilities on August 2, 2005. A total of approximately 1800 cubic feet of soil from EW001, EW002, EW006, EW009, EW012, EW013, EW014, EW015, and EW016 was stored at this facility (Attachment B).

Should there be any questions regarding the information contained in this MFR, please contact Mr. Sean Bergquist or Mr. Ian Wren at (626) 683-3547.

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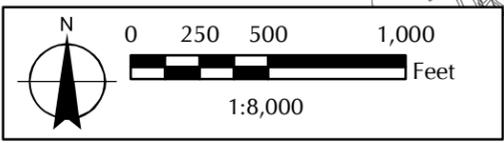
<sup>8</sup> Withman, C.W., Bauder, E.T., Denton, D., Ferren Jr., W.R., Ornduff, R. 1998. *Ecology, Conservation, and Management of Vernal Pool Ecosystems – Proceedings from a 1996 Conference*. California Native Plant Society, Sacramento, CA. 147-150.

***ATTACHMENT A  
RIVERSIDE FAIRY SHRIMP SAMPLING AREAS***

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SOURCE: LAWA, PSOMAS, SEI



 Ephemeral Wetted Pools



***ATTACHMENT B***  
***RIVERSIDE FAIRY SHRIMP SALVAGE AND STORAGE PHOTOS***

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**PHOTO 1**  
EW002 before salvage of RFS cyst-bearing soils



**PHOTO 2**  
EW002 salvage of RFS cyst-bearing soils





**PHOTO 3**  
EW002 after salvage of RFS cyst-bearing soils



**PHOTO 4**  
EW002 close-up of grid before salvage of RFS cyst-bearing soils





**PHOTO 5**  
EW002 close-up of grid after salvage of RFS cyst-bearing soils



**PHOTO 6**  
EW006 before salvage of RFS cyst-bearing soils





**PHOTO 7**  
EW006 after salvage of RFS cystbearing soils



**PHOTO 8**  
EW009 before salvage of RFS cyst-bearing soils





**PHOTO 9**  
EW012 before salvage of RFS cyst-bearing soils



**PHOTO 10**  
EW012 after salvage of RFS cyst-bearing soils





**PHOTO 11**

EW013 before salvage of RFS cyst-bearing soils



**PHOTO 12**

EW014 before salvage of RFS cyst-bearing soils





**PHOTO 13**

EW014 vegetation clearing prior to salvage of RFS cyst-bearing soils



**PHOTO 14**

EW014 close-up of soil exhibiting dry season cracking



**ATTACHMENT B**

Riverside Fairy Shrimp Salvage and Storage Photos



**PHOTO 15**  
EW015 before salvage of RFS cyst-bearing soils



**PHOTO 16**  
EW015 after salvage of RFS cyst-bearing soils





**PHOTO 17**  
EW016 before salvage of RFS cyst-bearing soils



**PHOTO 18**  
EW016 after salvage of RFS cyst-bearing soils





**PHOTO 19**  
Climate-controlled storage facility



**PHOTO 20**  
Climate-controlled storage facility



## **APPENDIX F**

**Los Angeles World Airports Environmental Management Division (Internal Report): "Monitoring Report for the Conservation of the Riverside Fairy Shrimp Cysts from the Los Angeles International Airport July 13 - August 8, 2005."**

# Los Angeles World Airports Environmental Management Division

## Monitoring Report for The Conservation of the Riverside Fairy Shrimp Cysts from the Los Angeles International Airport (LAX) July 13, 2005 – August 8, 2005

### Background

Pursuant to the Biological Opinions (BO) for the LAX Master Plan EIR Alternative D issued on April 20, 2004, the salvage and storage of the Riverside Fairy Shrimp (RFS) cysts-bearing soil is one of the conservation measures to mitigate for the impacts due to the LAX Master Plan development. The subjects of the BO are RFS cysts embedded in the soil within the ephemeraally wetted (EW) areas identified as EW-001, EW-002, and EW-006 (see Attachment 1).

Similarly, pursuant to the Biological Opinions (BO) for Operation and Maintenance (O&M) of Los Angeles International Airport issued on April 8, 2005, the salvage and storage of the Riverside Fairy Shrimp (RFS) cysts-bearing soil is one of the conservation measures to mitigate for the impacts of regular operation and maintenance activities at the airport. The subjects of the BO are RFS cysts embedded in the soil within the ephemeraally wetted areas identified as EW-009, EW-012, EW-013, EW-014, EW-015 and EW-016 (see Attachment 1).

In compliance to the above US Fish and Wildlife Services BOs, from July 13 through August 9, 2005, Sapphos Environmental Inc., Los Angeles World Airport's (LAWA) wildlife consultant, collected and curated the top 3-5 cm of the cysts-bearing soil from the above referenced nine ephemeraally wetted pools. The conservation fieldwork was performed in accordance to the guidelines established in the following documents

- CTL/Sapphos proposal dated June 10, 2005,
- Biological Opinions (BO) for Alternative D, Conservation Measure 3 (April 20, 2004),
- Biological Opinions (BO) for Operation and Maintenance (April 8, 2005),
- Biological Assessment (September 29, 2004)
- MMRP, MM-ET-1 (LAX Master Plan mitigation measure), and
- Sapphos' Memorandum for the Record (July 7, 2005).

The collected cysts are being temporally stored at a nearby secured storage facility. The final destination for the salvaged cysts from the O&M sites is to reestablished a habitat for the fairy shrimp at the Madrona Marsh Preserve and Nature Center located in Torrance California, pending City of Torrance's approval. The salvaged cysts from Alternative D pools will be transplanted to the former Marine Corps Air Station located at El Toro, California.

During all phases of the fieldwork, on as needed bases, Sapphos Environmental solicited and obtained instructions from the U.S. Fish and Wildlife Service, Carlsbad regional office.

### **Site Monitoring**

Throughout the daily conservation effort from July 13 through August 9, LAWA's Environmental Management Division (EMD) staff escorted and documented Sapphos' collection and curation activities in the designated pool areas. A record of EMD's site audits is found in Attachment 2.

### **Fieldwork**

Prior to the start of the collection effort, on July 13 and 14, Sapphos' Habitat Restoration Specialists Mr. Ian F. Wren and Mr. Charles J. Randel went to the general areas where the pools were originally identified back in 1998. Using survey maps with GPS coordinates, the biologists delineated the perspective pool areas. All the pools were further subdivided into smaller grids and GPS coordinates were assigned to each sub-unit for the future identification of the origin of each sample collected. Photographs of the EW pools prior to the start of the salvage work is provided in Attachment 3.

The actual soil collection fieldwork occurred on July 19, 20, 21, 22, 25, 26, 27, 28, 29, August 3 and 8, 2005.

The project biologists followed the USF&WS guideline in all aspects of the work. Vegetation was first cleared from the sites. The top 3-5 cm of cysts-bearing soil was then collected. After which, the soil was placed into protective plastic bags. The bags were further packaged into protective boxes. The boxes were sealed and labeled to identify the pools and sub-grid locations where the soil originally was obtained. Throughout every day of the fieldwork, the weather was dry and warm. This weather condition conformed to the instructions specified in the BOs. In all, approximately 1800 cubic feet of soil was collected from the nine pool areas.

The packaged and labeled cysts-bearing soil was taken from the LAX and stored at an USF&WS approved nearby storage facility. The boxes of soil was completely transport from the airport to the nearby curation facility after four separate trips. Cysts from EW006, EW-009, EW-013 (partial) and EW-015 (partial) were removed on July 29, 2005. Cysts from EW-012, EW-013 (remaining boxes), EW-015 (remaining boxes) and EW-016 were removed on August 3, 2005. Cysts from EW-002 and EW-014 (partial) were removed on August 4, 2005. Cysts from EW-001 and EW-014 (remaining boxes) were removed on August 8, 2005. Photographs of the vacated EW pool areas are found in Attachment 4.

### **Project Biologists**

From July 11 through July 22, Mr. Ian F. Wren and Mr. Charles J. Randel were Sapphos' project primary biologists overseeing all aspects of the cysts-bearing soil collection work.

From July 25 through August 8, Mr. Sean Bergquist replaced Charles Randel. Mr. Ian F. Wren and Mr. Sean Bergquist were the project biologists overseeing all aspects of the cysts-bearing soil collection, removal and storage work.

### **USFW&S Inspection**

On August 2, 2005, Mr. Michael Bianchi of the U.S. Fish and Wildlife Service, Carlsbad regional office, visited LAX. He inspected all nine EW pool areas and approved the collection, removal and the storage method employed in the field. Mr. Bianchi provided final instructions to Sapphos Environmental for completing the project.

### **Curation/Storage**

All 1800 cubic feet of cysts-bearing soil, in labeled and sealed boxes, was removed from LAX by August 8, 2005. The samples were taken to the following secured storage facility:

Public Storage  
12681 Jefferson Blvd.  
Los Angeles, CA 90066  
310-838-7368

The boxes are curated in a 24 hours temperature controlled locker. The temperature is maintained in the range of 72 to 75 degrees Fahrenheit. This location is approved by the U.S. Fish and Wildlife Service, Carlsbad regional office (see Attachment 5) for the curation of the cysts-bearing soil.

Should there be any questions regarding the information contained in this Monitoring Report, please contact Dr. Andrew B. Huang, LAWA's EMD Supervisor at (310) 646-3853.

- ATTACHMENT 1: EW Pool Site Map (1 map)
- ATTACHMENT 2: EMD: Signup Sheet & Audit Record (21 pages)
- ATTACHMENT 3: EW Pools Prior to Conservation Work (9 photos)
- ATTACHMENT 4: EW Pools After Soil Collection Work (9 photos)
- ATTACHMENT 5: Cysts-Bearing Soil Secured Storage Facility (1photo)

ATTACHMENT 1: EW Pool Site Map



SOURCE: LAWA, PSOMAS, SEI



**ATTACHMENT 2:**  
**Environmental Management Division (EMD)**  
**Signup Sheet & Audit Record**

Riverside Fairy Shrimp Cysts Removal Project  
 Environmental Management  
 July  
 June, 2005

**ESCORT RECORD**

Date	Start	End	Location	Activity	Name	Signature
7/13/05	8:00 AM	2:30 PM	all pools	pool mopping	Andrew Huang	<i>Andrew Huang</i>
7/14/05	7:40 AM	12:00 AM	all pools	pool mopping	Andrew Huang	<i>Andrew Huang</i>
7/19/05	11:15 AM	4:45 PM	EW 2	curation/collection	Steve Durkee	<i>Steve Durkee</i>
7/20/05	8:45 a.m.	12:00 p.m.	EW 6	" "	Alfred Tong	<i>Alfred Tong</i>
7/20/05	12:57 p.m.	4:00 P.M.	EW 15	" "	Erica Blythe	<i>Erica Blythe</i>
7/21/05	8:00 AM	4:00 PM	EW 9, 12, 13	curation/solution	TIM DEMAY	<i>Tim Demay</i>
7/22/05	8:00 AM	4:30 PM	EW 12 + 13	curation "	Nancy Chunn	<i>NChunn</i>
7/25/05	8:00 AM	12:15 PM	EW 14	curation "	Nancy Chunn	<i>NChunn</i>
7/25/05	1:30 PM	4:30 PM	EW 15	CURATION "	LARRY	<i>Larry</i>
7/26/05	8:00 AM	4:00 PM	EW 14	CURATION	SOMVANG MEKSAVONGH	<i>Somvang Meksavongh</i>
7/27/05	8:00 AM	4:00 PM	EW 14	Curation/collection	Erica Blythe	<i>Erica Blythe</i>



**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Andrew Huang Signature: Andrew Huang

Date: 7/13/05

Time: 9:00 AM - 2:30 P.M.

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Ian F. Wren

Name: Sean Bergquist

Location of Audit: all pools

Activities: pool delineation

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	X		
Referenced to Recovery Plan for Vernal Pools of Southern California?	X		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	X		
Top 3-5 cm of soil collected?	X		
Dry weather conditions?	X		
Collection method according to USF&WS approved guideline?	X		
Work supervised by approved biologists?	X		
Samples packaged in bags and boxes?	X		
Boxes properly labeled?	X		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Andrew Huang Signature: Andrew Huang  
 Date: 7/14/05  
 Time: 7:40 am - 12:00 noon

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Jan F. Wren  
 Name: Sean Bergquist  
 Location of Audit: all pool  
 Activities: pool delineation

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 3 discrete locations (EW-001, EW-002, & EW-006) within the areas of ephermally wetted pools as defined in the Biological Opinion?	✓		
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Steven Durkee Signature: *Steven Durkee*

Date: 7-19-05

Time: 11:15am - 4:45pm

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Eay Uren

Name: Charles Randel

Location of Audit: EW-2

Activities: Collection

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	X		
Referenced to Recovery Plan for Vernal Pools of Southern California?	X		
Are Riverside Fairy Shrimp cysts collected from the 3 discrete locations (EW-001, EW-002, & EW-006) within the areas of epherally wetted pools as defined in the Biological Opinion?	X		EW 002
Top 3-5 cm of soil collected?	X		
Dry weather conditions?	X		
Collection method according to USF&WS approved guideline?	X		
Work supervised by approved biologists?	X		
Samples packaged in bags and boxes?	X		
Boxes properly labeled?	X		

LAWA Supervisor: Andrew Huang Signature: *Andrew Huang*

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: ALFRED TONG Signature: Alfred Tong  
 Date: 7-20-05  
 Time: 8:45 a.m. - 12:00 p.m.

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Jon Wren  
 Name: Sean Bergquist  
 Location of Audit: EW 6  
 Activities: Collection of cyst containing soils

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 3 discrete locations (EW-001, EW-002, & EW-006) within the areas of ephemerally wetted pools as defined in the Biological Opinion?	✓		EW 006
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Erica Blythe Signature: Erica Blythe  
 Date: 7/20/05  
 Time: 12:57 p.m. - 4:00 p.m.

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Jan F. Wren  
 Name: Charles Randel  
 Location of Audit: EW 15  
 Activities: Collection

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephermally wetted pools as defined in the Biological Opinion?	✓		EW015
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: TIM DEMOSS Signature: [Signature]

Date: 7/21/05

Time: 8:00 am - 4:00 pm

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: IAN F WREN

Name: JEAN BERGQUIST

Location of Audit: EW 9, 12, 13

Activities: CURATION / COLLECTION

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		EW009 EW012 EW013
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: [Signature]

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)  
Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Nancy Chuan Signature: NChuan

Date: 7/22/05

Time: 8 AM to 4:30 PM

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: Ian Wren

Name: Sean Bergquist

Location of Audit: EW 12 & 13

Activities: Curation/Collection

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	X		
Referenced to Recovery Plan for Vernal Pools of Southern California?	X		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephermally wetted pools as defined in the Biological Opinion?	X		EW012 & EW013
Top 3-5 cm of soil collected?	X		
Dry weather conditions?	X		
Collection method according to USF&WS approved guideline?	X		
Work supervised by approved biologists?	X		
Samples packaged in bags and boxes?	X		
Boxes properly labeled?	X		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)  
Monitoring Checklist For**

**The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Nancy Chunn Signature: NChunn

Date: 8:00 AM To Noon

Time: 7/25/05

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: Fan Wren

Name: Charles Rendel

Location of Audit: EW 14

Activities: Curation and Collection

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	X		
Referenced to Recovery Plan for Vernal Pools of Southern California?	X		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephermally wetted pools as defined in the Biological Opinion?	X		EW014
Top 3-5 cm of soil collected?	X		
Dry weather conditions?	X		
Collection method according to USF&WS approved guideline?	X		
Work supervised by approved biologists?	X		
Samples packaged in bags and boxes?	X		
Boxes properly labeled?	X		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: LARRY J. POWELL Signature: Larry J Powell

Date: 7/25/05

Time: 1:30 PM - 4:30 PM

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: IAN F. WREN

Name: SEAN BERGQUIST

Location of Audit: EW 15

Activities: CURATION

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephemerally wetted pools as defined in the Biological Opinion?	✓		EW 015
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)  
Monitoring Checklist For**

**The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: SOMVANG MEKSAVANH Signature: [Signature]

Date: 07/26/2005

Time: 08:00 - 4:00 PM

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: IAN F. WREN

Name: SEAN BERGQUIST

Location of Audit: EW 14

Activities: CURATION

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephemerally wetted pools as defined in the Biological Opinion?	✓		EW 014
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: [Signature]

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: LARRY J. POWELL Signature: Larry J. Powell

Date: 7/26/05

Time: 1:00 PM - 4:00 PM

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: IAN F. WREN

Name: SEAN BERGQUIST

Location of Audit: EW16

Activities: CURATION

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		EW-016
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Erica Blythe Signature: Erica Blythe

Date: 7/27/05

Time: 8 am - 4 p.m.

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Ian Wren

Name: Sean Bergquist

Location of Audit: EW 14

Activities: Collection

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephemerally wetted pools as defined in the Biological Opinion?	✓		EW 14
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: SOMVANG MEKSAVANKI Signature: *Somvang Meksavanki*  
 Date: 07/28/2005  
 Time: 08:00 - 3:30 PM

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: IAN F. WREN

Name: SEAN BERGQUIST

Location of Audit: EW 14

Activities: CURATION

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		EW 014
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: *Andrew Huang*

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Andrew Huang Signature: Andrew Huang

Date: 7/29/05

Time: 10:15 - 2:00 pm.

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Jan F. Wren

Name: Sean Bergquist

Location of Audit: EW06, 9, 13, 15

Activities: Auditing

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Erica Blythe Signature: Erica Blythe  
 Date: 8-02-2005  
 Time: 8-12

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Sean Bergquist  
 Name: Ian Wren  
 Location of Audit: All  
 Activities: Observation

*USFWS  
Mike Bianchi  
Inspection*

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 3 discrete locations (EW-001, EW-002, & EW-006) within the areas of ephermally wetted pools as defined in the Biological Opinion?	✓		<i>All pools were inspected by Mike Bianchi</i>
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrea Huang Signature: Andrea Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Nancy Chunn Signature: Nancy Chunn

Date: 8/3/05

Time: 8:00 AM to 4:10 PM

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: Jan Wren

Name: Sean Bergquist

Location of Audit: EW 13, 12, 15, 16

Activities: Hauling

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	X		
Referenced to Recovery Plan for Vernal Pools of Southern California?	X		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephemerally wetted pools as defined in the Biological Opinion?	X		
Top 3-5 cm of soil collected?	X		
Dry weather conditions?	X		
Collection method according to USF&WS approved guideline?	X		
Work supervised by approved biologists?	X		
Samples packaged in bags and boxes?	X		
Boxes properly labeled?	X		

LAWA Supervisor: Andrew Hoag Signature: Andrew Hoag

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)  
Monitoring Checklist For**

**The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: SOMVANG MEKSAVANH Signature: *Somvang Meksavanh*

Date: 08/04/2005

Time: 08:30 - 4:20 PM

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: IAN F. WREN

Name: CHARLES J. RANDEL

Location of Audit: EW2 & EW14

Activities: HAULING

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of ephermally wetted pools as defined in the Biological Opinion?	✓		EW014 & EW002
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: *Andrew Huang*

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: LARRY J. POWELL Signature: Larry J Powell

Date: 8/8/05

Time: 1:00 - 4:00

Sapphos Environmental Inc.'s Habitat Restoration Specialists:

Name: IAN F. WREN

Name: SEAN BERGQUIST

Location of Audit: EW14 + EW1

Activities: HAULING

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		<i>and EW001</i>
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**Los Angeles World Airport (LAWA)  
Environmental Management Division (EMD)**

**Monitoring Checklist For  
The Collection of the Riverside Fairy Shrimp Cysts-Bearing Soil**

Name of Monitor: Erica Blythe Signature: Erica Blythe  
 Date: 8-8-2005  
 Time: 8-11

**Sapphos Environmental Inc.'s Habitat Restoration Specialists:**

Name: Sean Bergquist

Name: \_\_\_\_\_

Location of Audit: EW14

Activities: Moving Boxes

AUDIT QUESTION	Yes	No	COMMENTS
Work plan in place?	✓		
Referenced to Recovery Plan for Vernal Pools of Southern California?	✓		
Are Riverside Fairy Shrimp cysts collected from the 6 discrete locations (EW-009, EW-012, EW-013, EW-014, EW-015 & EW-016) within the areas of epherally wetted pools as defined in the Biological Opinion?	✓		hauled boxes from EW014
Top 3-5 cm of soil collected?	✓		
Dry weather conditions?	✓		
Collection method according to USF&WS approved guideline?	✓		
Work supervised by approved biologists?	✓		
Samples packaged in bags and boxes?	✓		
Boxes properly labeled?	✓		

LAWA Supervisor: Andrew Huang Signature: Andrew Huang

**ATTACHMENT 3:  
EW Pools Prior to Conservation Work**



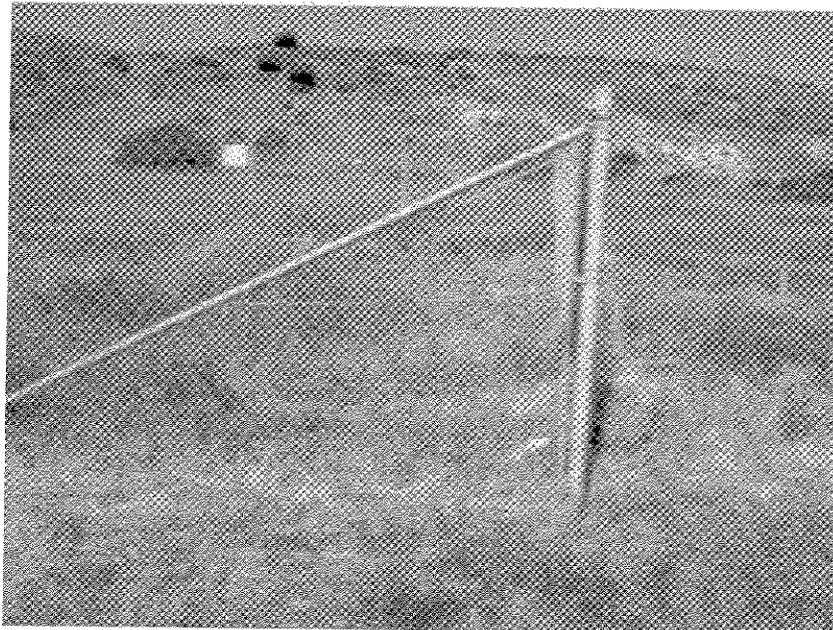
**Photo 1: EW001 Prior to Conservation Work**



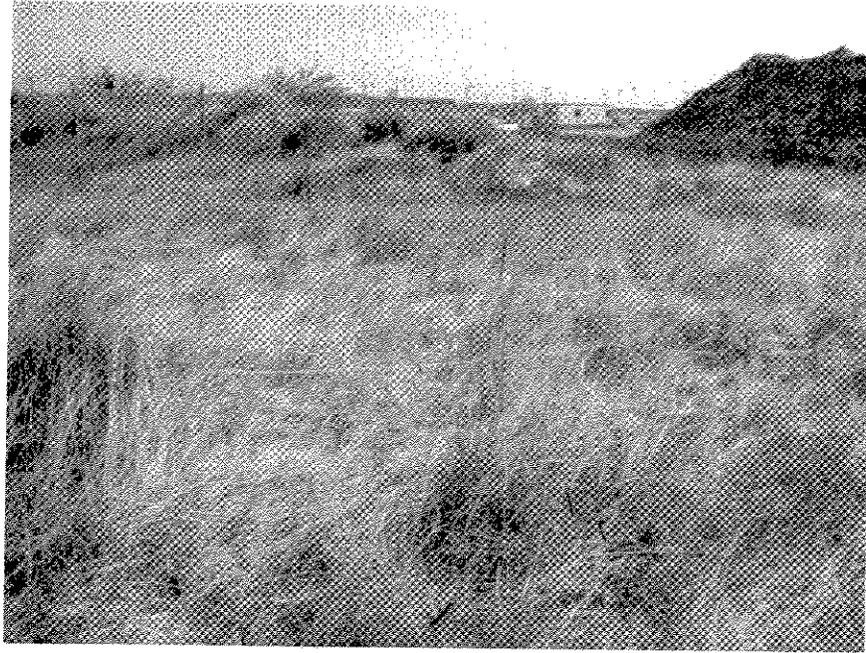
**Photo 2: EW002 Prior to Conservation Work**



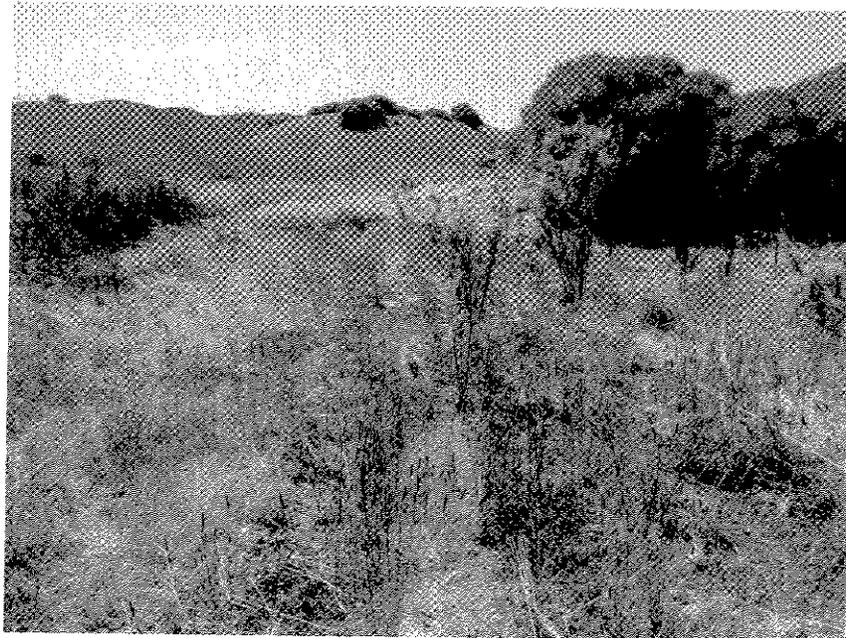
**Photo 3: EW006 Prior to Conservation Work**



**Photo 4: EW009 Prior to Conservation Work**



**Photo 5: EW012 Prior to Conservation Work**



**Photo 6: EW013 Prior to Conservation Work**



**Photo 7: EW014 Prior to Conservation Work**

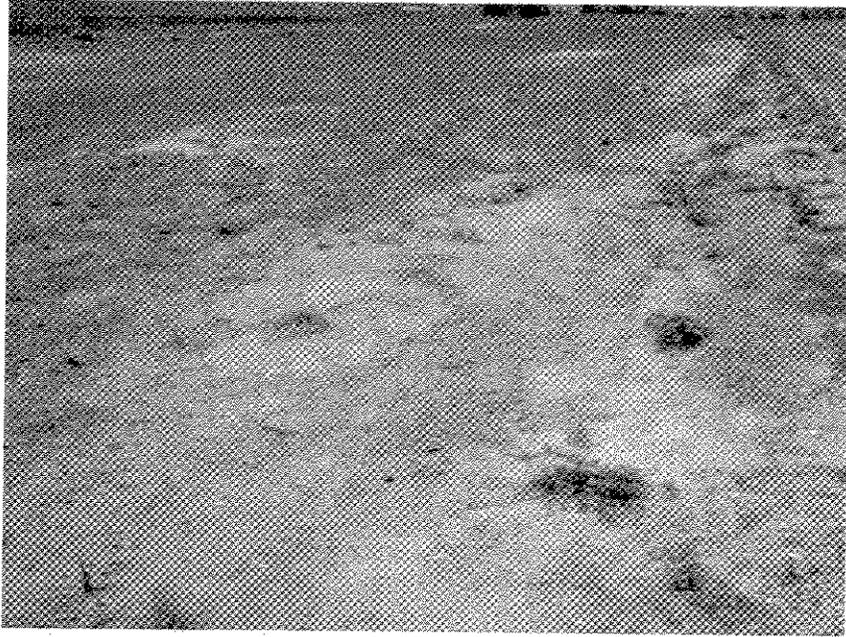


**Photo 8: EW015 Prior to Conservation Work**



**Photo 9: EW016 Prior to Conservation Work**

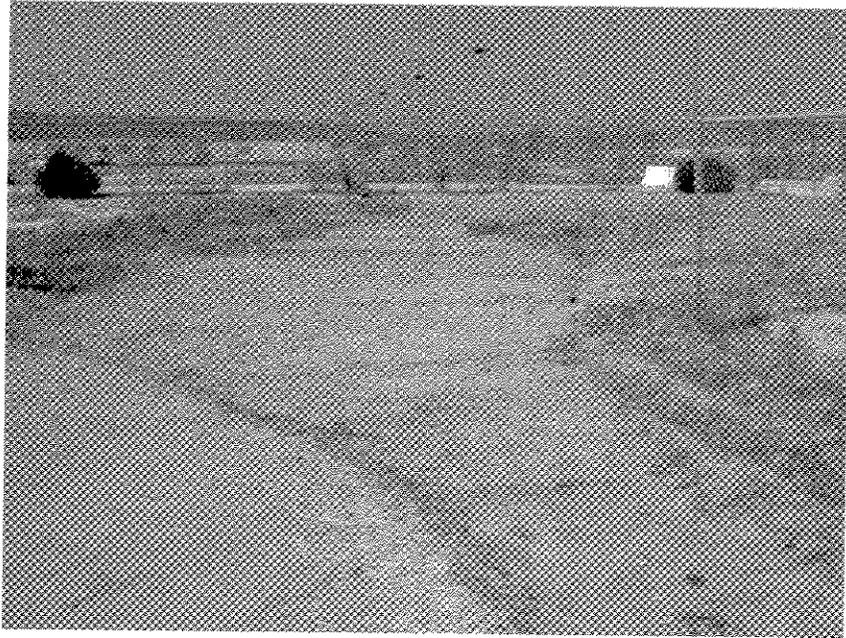
ATTACHMENT 4:  
EW Pools After Soil Collection Work



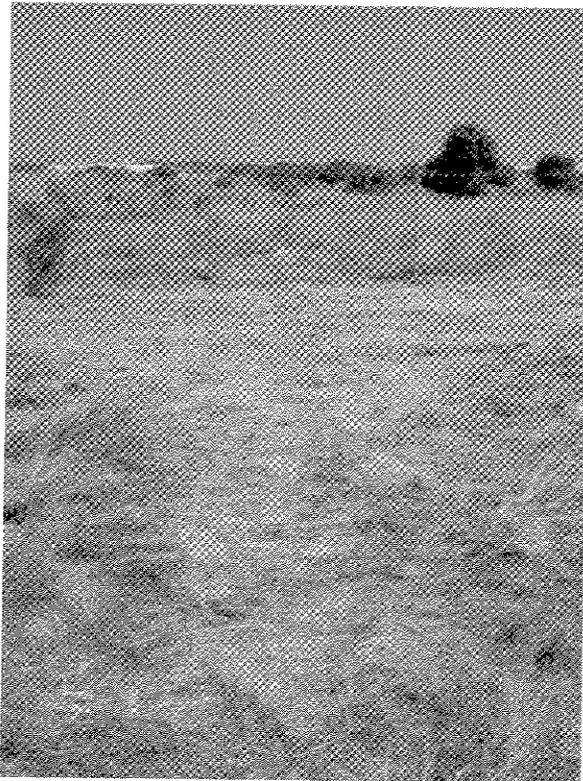
**Photo 10: EW001 After Cysts-Bearing Soil Removal**



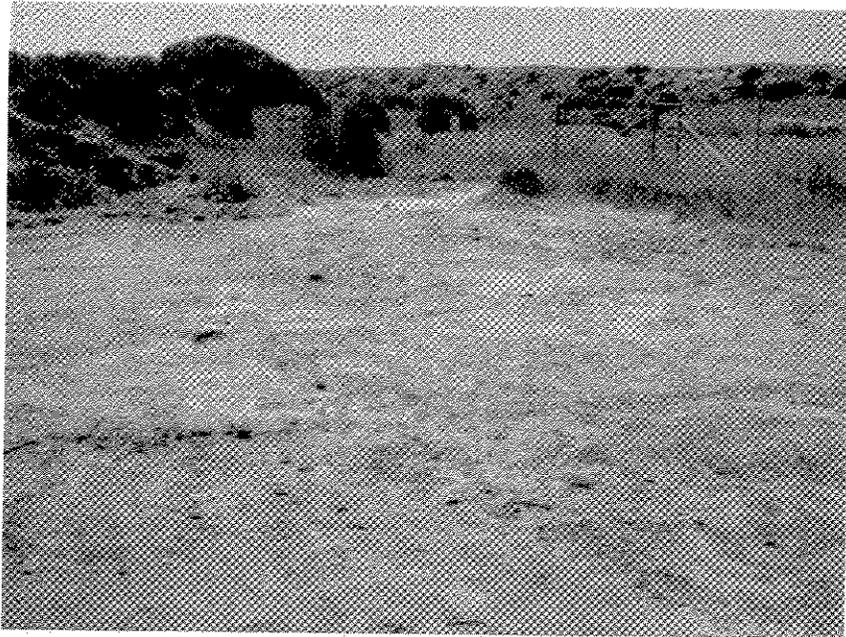
**Photo 11: EW002 After Cysts-Bearing Soil Removal**



**Photo 12: EW006 After Cysts-Bearing Soil Removal**



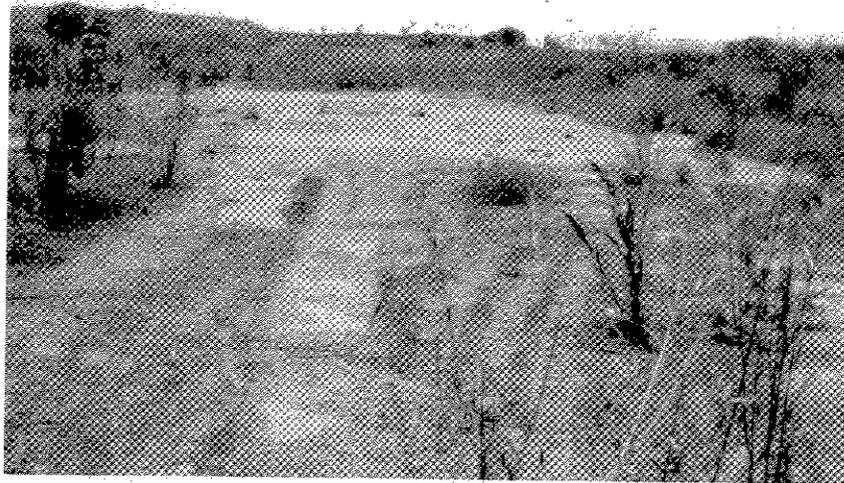
**Photo 13: EW009 After Cysts-Bearing Soil Removal**



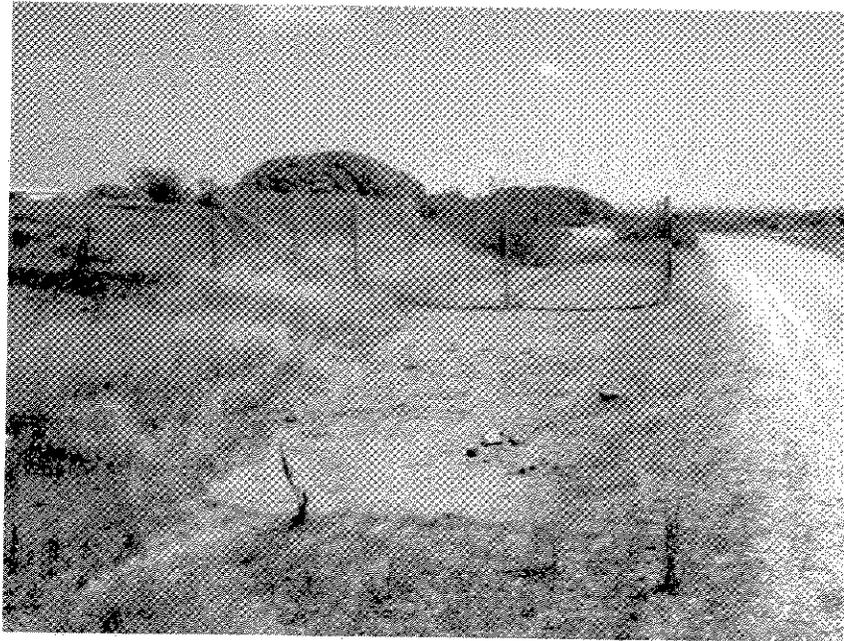
**Photo 14: EW012 After Cysts-Bearing Soil Removal**



**Photo 15: EW013 After Cysts-Bearing Soil Removal**



**Photo 16: EW014 After Cysts-Bearing Soil Removal**



**Photo 17: EW015 After Cysts-Bearing Soil Removal**



**Photo 18: EW016 After Cysts-Bearing Soil Removal**

**ATTACHMENT 5:**  
**Cysts-Bearing Soil Secured Storage Facility**



**Photo 19: Cysts-Bearing Soil Curation/Storage Facility**

## **APPENDIX G**

### **USDA Loggerhead Shrike and Black-Tailed Jackrabbit (BTJR) Report**



United States  
Department of  
Agriculture

Subject: Loggerhead Shrike (LOSH) and Black-Tailed Jackrabbit (BTJR) Report

Date: February 6, 2006

Marketing and  
Regulatory  
Programs

To: Environmental Management Division  
Attn: Gary Brown, Dr. Andrew Huang, and Dr. Alfred Tong

Animal and  
Plant Health  
Inspection  
Service

## Introduction

Wildlife  
Services

In an effort to conduct a wildlife survey for the presence of LOSH and BTJR in the southwest corner of LAX, a special drive-through wildlife point count (WPC) survey was conducted from 1/3/06 to 1/31/06 (see map in Appendix 1). This area includes a habitat of mixed shrubs and grasses, growing in a relatively isolated area of the airport and the habitat type used by LOSH and BTJR. The WPC survey dates for weeks 1-5 in January 2006 included 20 survey dates and are included as follows: 1 = 1/3/06 – 1/6/06; 2 = 1/9/06 – 1/13/06; 3 = 1/17/06 – 1/20/06; 4 = 1/23/06 – 1/27/06 and; 5 = 1/30/06 – 1/31/06.

California State  
Office

3419A Arden Way  
Sacramento, CA  
95825  
(916) 979-2675

In addition to the WPC, six Wildlife Hazard Assessments were conducted on the airport in the month of January with numbers of LOSH and BTJR sightings reported from location 9 in Appendix 1.

## WHA and LOSH/BTJR Survey Protocol

### WHA On-Airport Survey

Bird abundance and activity patterns on the airfield were surveyed using the standardized sampling design, based on the USFWS Breeding Bird Survey. Bird populations were surveyed at approximate two-week intervals from April 2005 through March 2006. The start-time of each count was varied, with an emphasis on the crepuscular periods of dawn and dusk. Time-area counts were conducted at 14 stations (see map in Appendix 1) on LAX airport. Survey points were selectively chosen based on their ability to represent key habitats throughout the airfield, ease of access, and area of coverage. Each station was surveyed for a 3-minute period using the naked eye, and all birds that were seen within a 1/4-mile radius were recorded. Binoculars were used only to verify observations and to key-out questionable species. The species, activity (e.g. flying, loafing, nesting, etc.), habitat type, number seen, and any other pertinent observations were also noted. Data collected during these surveys will serve as a baseline for comparison of wildlife activity in subsequent years, enabling LAX management to assess the efficacy of new wildlife control methods. The number of LOSH and BTJR were recorded for each observation site in the southwest area of the airfield and summarized in Table 1.

## **WHA Off-Airport Survey**

Off-airport bird surveys were conducted at 8 sites: Waterview Street, Vista Del Mar Park, Hyperion Wastewater Treatment Plant, parking lot B, shuttle bus/limousine/tour bus staging area, Aviation Boulevard - ILS Area, Southwest Cargo Building, and Westchester Recreation Center. The off-airport surveys were conducted 6 times per month on the same days as the on-airport bird surveys. These 8 sites were selected due to their proximity to the airport, and the possibility that they could attract birds hazardous to aircraft. At each site, species, number, activity, and cover type were recorded. These surveys were incidental surveys not used in the statistical analysis of individual species.

## **LOSH/BTJR WPC Survey**

The southwest corner of LAX (location 9 in Appendix 1) was surveyed by driving through the area at 5 mph and stopping at 100 meter intervals for three minutes to observe for wildlife in the area using the U.S. Fish and Wildlife bird count survey protocol (LAX Wildlife Hazard Assessment). The area was surveyed from west to east during daylight hours from the paved and unpaved perimeter road, which allowed access into the survey area. The number of target species were recorded for each 100 meter observation site and summarized in Table 1.

## **Results**

Results of BTJR and LOSH observed at each 100 meter site for 20 survey days in January 2006 are listed in Table 1.

Table 1. Number of LOSH and BTJR observed in 100 m interval sites within the southwest area of LAX during the WHA and WPC in January 2006.

	<b>Weeks</b>				
<b>Species</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>BTJR</b>	0	0	0	0	0
<b>LOSH</b>	0	0	0	0	0
<b>Total</b>	0	0	0	0	0

Todd J. Pitlik  
Wildlife Biologist,  
USDA-Wildlife Services, LAWA

# LAX WHA & LOSH/BTJR Survey

WHA survey sites are numbered 1-14 & A-H  
LOSH/BTJR WCS route is in black arrows



## **APPENDIX H**

**Letter from California Coastal Commission to LAWA,  
dated December 16, 2005, indicating that the Final  
Conceptual Drainage Plan for the LAX Master Plan was  
found to be consistent with the California Coastal  
Management Program**

## CALIFORNIA COASTAL COMMISSION

45 FREMONT, SUITE 2000  
SAN FRANCISCO, CA 94105-2219  
VOICE AND TDD (415) 904-5200  
FAX (415) 904-5400



December 16, 2005

Patricia V. Tubert  
Deputy Executive Director  
Los Angeles World Airports  
P.O. Box 92216  
Los Angeles, CA 90009-2216

Subject: Consistency Certification CC-105-05, Final Conceptual Drainage Plan for LAX Master Plan

Dear Ms. Tubert:

On December 15, 2005, the California Coastal Commission concurred with the above-referenced consistency determination. The Commission found that the Final Conceptual Drainage Plan was consistent with the California Coastal Management Program.

Sincerely,

A handwritten signature in black ink that reads "LARRY SIMON".

Larry Simon  
Federal Consistency Coordinator

cc: California Department of Water Resources  
Governor's Washington, D.C., Office  
South Coast District Office  
Tony Skidmore, CDM

## **APPENDIX I**

### **LAX First Source Hiring and Aviation Related Training Plan**

# LAX FIRST SOURCE HIRING AND AVIATION RELATED TRAINING PLAN

Los Angeles Community Development Department (CDD)

## IMPLEMENTATION PLAN

A WorkSource Business Services office will be established on-site at the Westchester Employment Center where 3 Community Development Department (CDD) staff members (Sr. Project Coordinator, 2 Sr. Project Assistants) will implement the First Source Hiring and Aviation Related Training program components outlined in the LAX Community Benefits Agreement. In addition to general program administration, staff will provide outreach, recruitment, participant tracking coordination and business services. Staff will work with WorkSource Centers to outreach and assist residents living near the Airport in targeted noise contour zones to fill the hiring needs of Airport employers. Staff will meet regularly with Airport employers to determine training and hiring needs, develop training and pre-employment programs, and monitor each new training project against established program goals. Progress will be reported quarterly to the LAX Community Coalition and a single-point-of-contact at CDD will be designated for communication purposes.

**OUTREACH and RECRUITMENT** – LAX First Source Hiring jobseekers and Aviation Related Training participants will be recruited through the WorkSource system. CDD Staff will meet regularly with the WorkSource Centers located within the target outreach zones to discuss Airport related recruitments and training. All job openings will be posted on the SkillsMatch database to immediately match eligible jobseekers to available jobs. As an additional outreach tool, a direct mail piece will be created for residents located in the targeted zones to guide them to their nearest WorkSource Center for up-to-date information on aviation related jobs and to encourage SkillsMatch registration. After the initial 7-day First Source Hiring period ends, job leads will be shared among all 18 WorkSource Centers citywide and then opened to the 20 LA County WorkSource Centers after 14 days if the job order cannot be filled. Staff will hold outreach meetings with local area partners and create marketing materials as needed. Staff will also conduct job fairs for larger recruitment efforts and will share Airport employment and training information at local community events.

The Business Services staff will establish a working relationship with on and off Airport employers to coordinate training and will meet on an on-going basis to provide outreach and recruitment assistance. In addition to direct contact, employers will be invited to group information sessions regarding the First Source Hiring Plan and the role of the Business Services office.

Staff will manage the recruitment process using the following procedure:

- Develop a relationship with each on and off Airport employer
- Determine human resource needs of employer
- Work with employer to determine skill sets required for each job opening
- Create a job order in the web-based SkillsMatch database restricting notice to only those jobseekers within the targeted census tracts
- Immediately determine current eligible matches within the database
- Jobseekers receive email notification informing them of the match
- An email is forwarded to the nearest WorkSource Center for follow-up
- Assessment, screening and interviews are conducted
- After 7 days, if job order is not filled, restriction for targeted census tracts is lifted and the job opportunity becomes open to all City eligible jobseekers. If still open, the job order will be available after 14 days to the greater LA County WorkSource system.
- WorkSource Centers provide assessment, screening and candidate referrals. Support services are provided when necessary, such as childcare and transportation assistance.
- Follow up takes place with job developers at all City of Los Angeles WorkSource Centers as well as local area partners including the South Bay and LA County WIBs until each job order is filled.

### Aviation Related Training Program

The goal of the Aviation Related Training Program is to enable economically disadvantaged individuals in the LAX area to train for and secure employment in aviation-related occupations. Aimed at populations within 45 of the 79 census tracts of the Environmental Justice Study Area, primarily east of the airport, this program targets populations in the cities of Inglewood, Hawthorne, South Los Angeles and the unincorporated area of Lennox. CDD will manage the \$3M Aviation Related Training fund to train 500 to 700 residents per year. These training participants will be new, and in addition to those currently in any workforce development system.

The City of Los Angeles recognizes that the Environmental Justice Study Area includes many potential trainees and jobseekers who do not reside within the City of Los Angeles, and therefore are not under the jurisdiction of the Los Angeles WIB. To that end, the City will contract with the South Bay Workforce Investment Board (WIB) to deliver direct services to eligible clients that reside in those areas outside of the City boundary. In addition, the City will utilize the South Bay WIB to centrally manage the I-TRAIN training provider list and administer payments to selected vocational training providers to provide for continuity and greater efficiency through the entire program. Having extensive experience in the delivery of Workforce Development services as well as being the architects of the I-TRAIN system, which was utilized as the template for the State approved training inventory, the South Bay WIB will utilize programs, resources and relationships currently in place that to assist LA in successfully implementing the Aviation Related Training Program.

The training program's business model will incorporate an "employer driven" approach to ensure training is linked to guaranteed job placement. Airport employers will be surveyed to determine training needs and anticipated hiring trends. Training may be customized to meet each employer's hiring needs and may include a Vocational English as a Second Language or Basic Skills component. Pre-employment training will also take place at the WorkSource Centers to ensure job placement and retention.

Employers will be invited to pre-screen training candidates and will have an active role in determining the training provider. Training will be conducted based on the employer agreeing to hire at least 80% of the successfully trained jobseekers. Employers will also be asked to support the training program by contributing to the cost of training. For example, employers may pay 50% of the employee's On-the-Job training wages, or provide a training facility as part of their financial commitment.

In order to secure employment in specific aviation-related occupations, the South Bay WIB will immediately identify local agencies that provide specific courses related to training for the aviation industry, as well as employers who provide entry-level work experience to serve as preparation for job openings at LAX.

Training participants will have the ability to engage in one or more of the following activities:

- Pre-employment and soft skills training
- Short-term occupational skills training (classroom)
- On-the-Job Training
- Paid Work Experience
- Direct placement into unsubsidized employment

Most participants will engage in one or two programs concurrently. Training activities will generally be short term, lasting 4-6 months with an average \$4,000 cost on classroom training courses and an average of \$3,000 cost on Paid Work Experience and On-the-Job Training activities. SBWIB as well as selected L.A. City One-Stops/Worksource Centers will provide outreach, identification, referral, and case management of participants. Case Management will consist of the following functions:

- Comprehensive Vocational Assessment of all participants
- Referral of participants to contracted worksites/classroom training providers
- Ongoing participant case management
- Identification of additional services such as remediation which may be needed by limited English speaking participants
- Support services – child care, transportation assistance
- Job Placement services upon completion of training activities
- Participant follow-up

Unless a customized training provider is chosen by the employer, training providers will be chosen from the I-TRAIN list maintained by the South Bay WIB or the State of California's Eligible Training Provider List used by the WorkSource system. Courses from community colleges and the local school district are available on this list, as well as private training institution offerings. The South Bay WIB will assist by certifying training to the list and contracting with training providers for classroom training.

The following is an expanded outline relating to the programmatic activities/functions to be utilized for this program:

### Education and Employment Training (Classroom)

The Education and Employment Training (Classroom) component of this program is based upon participants being placed in vocational education programs at contracted training sites procured through the I-TRAIN system. These providers may be public, private non-profit, or private for-profit entities. The programs must be designed to provide individuals with the technical skills and practical experience necessary to perform a specific job or group of jobs upon the individual's completion of training.

In order to be placed on I-TRAIN, these training providers must meet extensive criteria and scrutiny. Upon completion of training, training providers will focus their efforts on participant placement. By contract, providers must place over 70% of their graduates into unsubsidized employment to remain in good standing.

Further, unlike traditional education providers (Public Schools, Colleges etc.) in which sessions start only in the fall and spring, most I-TRAIN vendors have open enrollment programs starting at multiple times during the year. With constant recruitment and enrollment into the program, this enables participants to continue to enroll in classes that have already started without being penalized by missing critical information.

### On-The-Job-Training

Short-term subsidized employment assignment wherein the employee's wage is up to 50% subsidized by the administrative authority. Upon completion of training, it is expected that the participant will be retained by the employer at the prevailing wage.

### Paid Work Experience

Utilizing an inventory of public and private non-profit organizations through existing contractual relationships, Paid Work Experience is a subsidized work assignment that combines part-time employment with employer-linked education/training program. Participants are placed into training positions with public or non-profit organizations and work alongside the organization's regular salaried employees while developing new skills which help build confidence, self-esteem, the development of good work habits and the establishment of a recent work history. A quality Paid Work Experience assignment helps prepare the participant for unsubsidized employment and self-sufficiency by encouraging responsibility, dependability and a strong work ethic.

### Direct Placement

Participants who do not require vocational training courses or soft skills may be directly placed into unsubsidized employment. However, if clients have been referred through the WorkSource system they will continue to receive case management and follow up services to ensure a successful outcome.

### WorkSource Center - Job Development and Case Management Services

**Case Management Services:** WorkSource Centers will employ a case management strategy that ensures that any barrier to training and employment success is quickly addressed. Case Managers will specifically focus on development of an immediate employment plan and determination of the appropriate training needed to achieve the projected employment goals. They will utilize the I-TRAIN System to identify training providers for classroom training courses; utilize the Work Experience Provider Inventory on I-TRAIN to identify work experience providers; and utilize existing or newly developed subcontract agreements for On-the-Job Training activities. Should barriers to employment be identified, Case Managers will refer participants to appropriate agencies for social and supportive services.

**Job Placement Services:** Job commitments will be secured for trainees prior to the start of training using the "employer driven" training model. Job placement will take place upon successful completion of classroom training, paid work experience and/or on-the-job training.

**Participant Tracking:** Training and participant tracking will be managed utilizing the City's Integrated Services Information System (ISIS).

### South Bay WIB I-TRAIN Administration

The South Bay WIB will Utilize existing and enter into new financial subcontract agreements for vocational education and employment training with vendors procured through the I-TRAIN system administered by SBWIB, enabling program participant's immediate access to local State approved providers.

The South Bay WIB will also provide for the collection and maintenance of performance data from vendors and reporting the status of all participants enrolled in vocational education and training courses. In addition, Fiscal Management, MIS, and I-TRAIN Technical Support will be provided as needed.

### Aviation Related Training Budget

\$2,700,000	Direct Participant Services to include training, tuition, books, support services (child care, transportation)
\$150,000	5% Administration to City of Los Angeles
\$150,000	Program Expenses
<u>\$3,000,000</u>	

# First Source Hiring and Aviation Related Training Flow Chart

