4.2 Biological Resources

4.2.1 Introduction

The biological resources analysis addresses the potential of the proposed Project to directly affect sensitive habitats, sensitive species, and jurisdictional aquatic features, including wetlands and waters of the United States, nursery habitats, wildlife movement corridors, habitat conservation plan, and natural community conservation plan areas that are afforded protection pursuant to federal, State, and local statutes and regulations. The analysis presented in this section characterizes the baseline conditions for biological resources, describes methods used in the evaluation of biological resources, summarizes the regulatory framework that guides the evaluation of biological resources, addresses potential impacts to biological resources associated with the proposed Project, and provides feasible mitigation measures capable of avoiding or reducing the significant effects of the proposed Project. The proposed Project would not cause any long-term changes to operations: departures and arrivals runway utilization, as well as arrival and departure thresholds on Runway 6L-24R and Runway 6R-24L would remain the same as existing conditions.

A Biological Assessment was prepared for the Detailed Study Area (DSA) in conjunction with this Draft EIR, which consisted of three site visits conducted May 8, June 14, and December 18, 2013 in addition to database and literature searches. The DSA includes areas of potential physical disturbance for the proposed runway safety area improvements, pavement reconstruction, and related construction impact areas. The DSA is illustrated in (**Figure 4.2-1**). Additional details of the site visits, as well as database lists of species and habitats, are provided in the Biological Assessment (**Appendix C**).

Vegetation communities within the surveyed DSA include California bulrush marsh, cattail marsh, perennial ryegrass field, sandbar willow thicket, smartweed-cocklebur patch, yellow starthistle field, disturbed/annual brome grassland, disturbed vegetation, ornamental, and existing construction area in addition to developed land. Each of these communities and cover types is discussed further in Section 4.2.3 below.

The Argo Ditch is identified in the National Wetlands Inventory (NWI) as a riverine, intermittent, streambed with a temporary flooded water regime; the ditch is excavated and falls under the jurisdiction of U.S. Army Corps of Engineers' (USACE) and California Department of Fish and Wildlife (CDFW). As of 1998, USACE exerted jurisdiction over the Argo Ditch because it ultimately discharges to the Pacific Ocean, which is a navigable water body pursuant to Section 404 of the Federal Clean Water Act. A jurisdictional delineation report was completed in August 2013 for the Argo Ditch and includes a review of two previous delineations of the Argo Ditch.

The USACE Wetland Delineation Manual defines wetland areas that have positive indicators for hydrophytic vegetation, wetland hydrology, and hydric soils as "areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

The jurisdictional aquatic features analysis addresses the potential effects to aquatic features defined as follows:

- Under the jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act;
- Under the jurisdiction of CDFW pursuant to Section 1600 of the Fish and Game Code;
- Under the jurisdiction of the State Water Resources Control Board pursuant to the Porter-Cologne Act;
- Wetlands as defined by the California Coastal Act (CCA); and
- Wetlands as classified by the U.S. Fish and Wildlife Service (USFWS) and CDFW under the Cowardin et.al. classification system.

Appendix D, *Jurisdictional Delineation*, discusses the findings of the jurisdictional delineation, and also includes information regarding the biological resources relative to jurisdictional aquatic features and the methodology used to assess both the environmental baseline conditions and project impacts.[1]

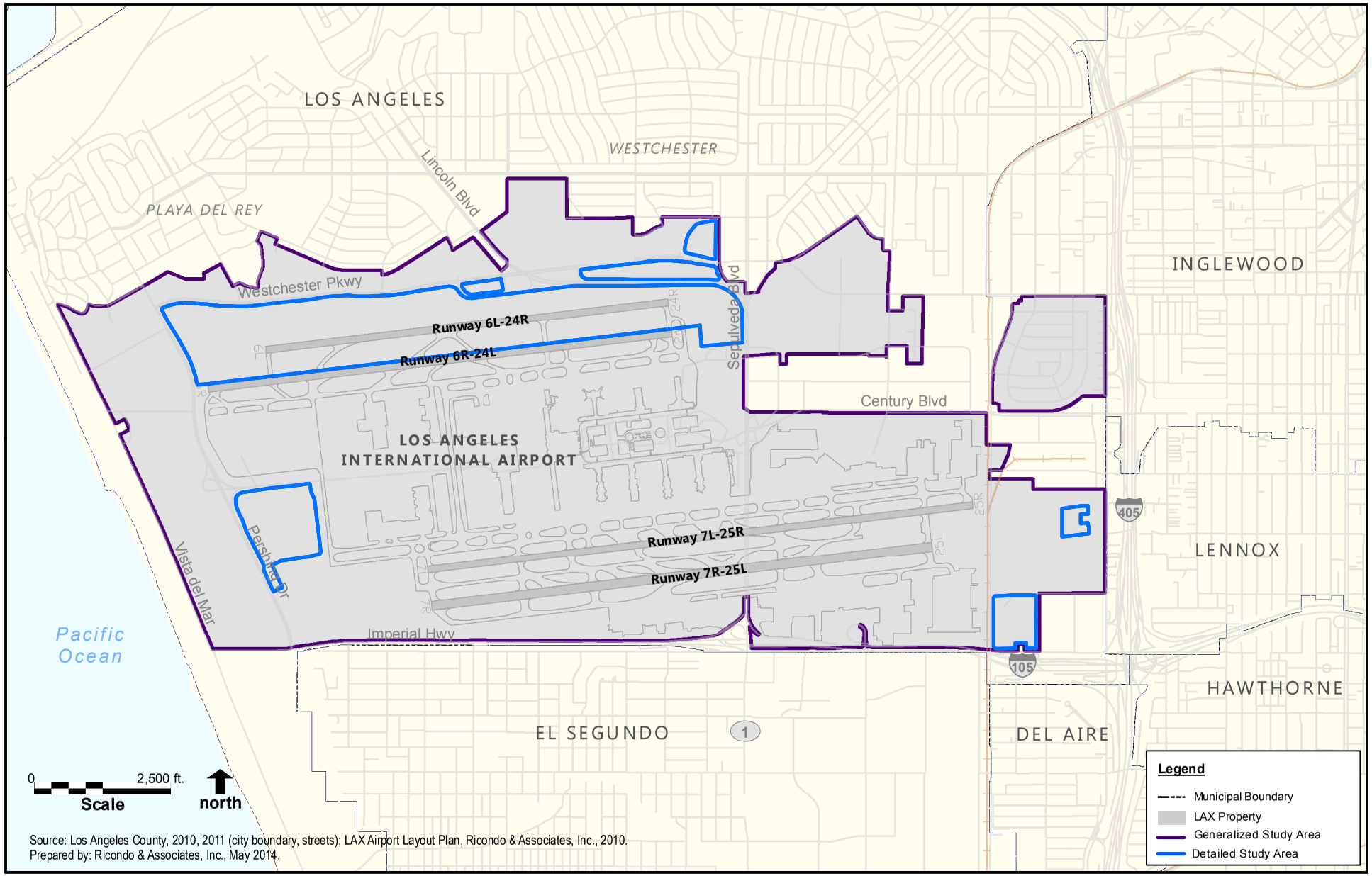
4.2.2 Methodology

Impacts to biotic communities and threatened and endangered species were assessed through a Biological Assessment prepared for the DSA in conjunction with this Draft EIR which included three site visits, a Jurisdictional Delineation Report (including separate site visits and field surveys), and database and literature searches. Additional details of the literature review, site visits, as well as database lists of species and habitats, are presented below and provided in the Biological Assessment (Appendix C).

The Biological Assessment takes into consideration proposed and designated critical habitat for federally listed species. Direct, indirect, and cumulative impacts resulting from construction, operation, and maintenance of the proposed Project were evaluated for all federally listed species and species proposed for listing as threatened and endangered species potentially occurring at LAX. Impacts on other federally, state, or locally designated sensitive species were evaluated to determine if implementation of the proposed Project could catalyze the need for listing of a species.

Review was undertaken for jurisdictional habitats that may fall under USACE jurisdiction pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344), wetland and streambed habitats under California Department of Fish and Wildlife (CDFW) jurisdiction pursuant to Section 1600 of the Fish and Game Code, and wetland habitat under California Coastal Commission (CCC) jurisdiction pursuant to Section 30121 of the California Coastal Act. USFWS records were mapped in order to determine the presence of wetlands and/or Waters of the United States. Additionally, a delineation report was conducted of the Argo Ditch to determine if this feature qualifies as a wetland or other Waters of the U.S. The jurisdictional delineation report for the Argo Ditch is provided in Appendix D. Wetlands in the vicinity of LAX are displayed on **Figure 4.2-2**.

[1] Sapphos Environmental, Inc., *Jurisdictional Delineation Report Los Angeles International Airport Proposed Runway 6L-24R and Runway 6R-24L Safety Area and Associated Improvements Project*, January 2014.



Source: Los Angeles County, 2010, 2011 (city boundary, streets); LAX Airport Layout Plan, Ricondo & Associates, Inc., 2010.
Prepared by: Ricondo & Associates, Inc., May 2014.

LAX Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Draft EIR

Proposed Project Study Areas

Figure
4.2-1

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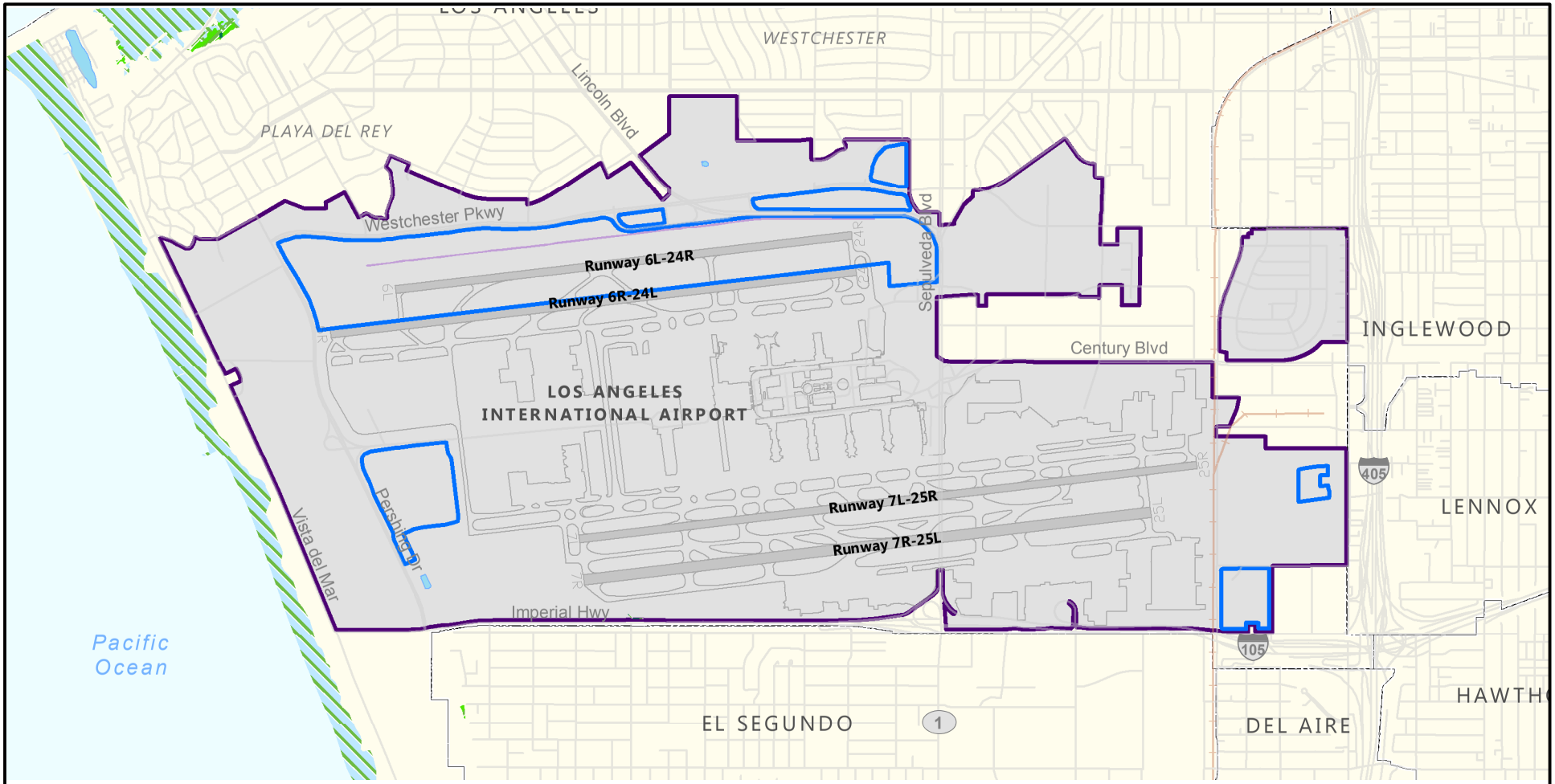

Source: Los Angeles County, 2010, 2011 (city boundary, streets); LAX Airport Layout Plan, U.S. Fish and Wildlife Service, National Wetlands Inventory, 2013; Ricondo & Associates, Inc., 2010.
Prepared by: Ricondo & Associates, Inc., May 2014.

LAX Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Draft EIR	Wetlands	Figure 4.2-2

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4.2.3 Baseline Conditions

The Biological Assessment concluded there is no designated critical habitat or areas proposed for designation for critical habitat for federally or state-listed wildlife within the proposed Project area (Appendix C). Critical habitat was identified for 7 wildlife species within 35 miles of the proposed Project area: El Segundo blue butterfly, Palos Verdes blue butterfly, southern steelhead, western snowy plover, southwestern willow flycatcher, coastal California gnatcatcher, and least Bell's vireo.

The literature review for the Biological Assessment (see Appendix C) identified 24 federally and state-listed endangered or threatened species, 1 federal candidate species, and 2 other sensitive species with the potential to occur in the vicinity of the DSA. Based on the results of the literature review, field surveys were undertaken to assess the potential for the proposed Project to affect the 27 listed, candidate or other sensitive species. Fourteen of the 27 species are listed or candidate plant species and were determined to be absent in the proposed DSA as a result of habitat assessment and focused surveys. One of the 27 species, Lewis' evening primrose (*Camissoniopsis lewisii*), is a sensitive plant species and was determined to be present in the proposed DSA as a result of habitat assessment and focused surveys. Twelve of the 27 species are listed wildlife species and were determined to be absent in the DSA, also as a result of habitat assessment and focused surveys. One of the 27 species, burrowing owl (*Athene cunicularia*), is a sensitive wildlife species and was determined to be present in the proposed DSA as a result of habitat assessment and focused surveys.

There are no federal or state-listed or candidate species that are known to be present within or immediately adjacent to the DSA. Virtually all areas that would be developed under the proposed Project consist of bare earth, paved surfaces, structures or ornamental (low habitat value) landscaping with exception of the Argo Ditch.

4.2.3.1 Regulatory Setting

CEQA requires the lead government agency to disclose the environmental effects of proposed Projects, as well as feasible alternatives or mitigation measures that would avoid or reduce significant adverse environmental effects, to decision-makers, and the public.[2] The State CEQA Guidelines also provide guidance for evaluating impacts to biological resources. In evaluating potential effects on biological resources, the State CEQA Guidelines[3] include mandatory findings of significance[4] and a checklist of biological resource impact questions in State CEQA Guidelines Appendix G. Although the mandatory findings of significance and Appendix G questions are intended to be used in determining whether an EIR must be prepared, they are also useful in identifying appropriate significance thresholds for particular projects. Lead

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2 California Environmental Quality Act, Public Resources Code Sections 21000 - 21177, and State CEQA Guidelines Sections 15000 - 15387, CEQA Guidelines Appendices.

3 The State CEQA Guidelines are found in Title 14, Division 6, Chapter 3 of the California Code of Regulations. Appendix G contains a sample environmental checklist form.

4 State CEQA Guidelines, Section 15065(a)(1).

agencies have discretion to use varying thresholds of significance, depending on the area affected.[5]

Floral and faunal species that are listed as federally threatened or endangered or are candidates for listing are protected under the Federal Endangered Species Act (FESA).[6] Section 9 of FESA prohibits the taking of species listed by the USFWS as endangered or threatened. As defined by FESA, "taking" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or to attempt to engage in such conduct. In recognition that a "take" cannot always be avoided, Section 10(a) of FESA includes a provision for incidental take of endangered and threatened species that occurs within the parameters of otherwise lawful activities and can be demonstrated to not adversely affect the ability of the species to survive and recover in the wild.

The California Endangered Species Act (CESA) prohibits the taking, importation, or sale of state-listed endangered or threatened species except in compliance with permits or conditions specified in the CESA.[7]

The CESA also authorizes CDFW to issue permits for incidental take of endangered or threatened species by general development activities, provided that the proposed Project will not jeopardize the continued existence of such species, and that any of the project's negative effects on those species will be minimized and fully mitigated. Finally, whenever a project takes a considerable amount of open space that provides habitat for plants and animals, whether or not any of them are endangered or threatened, CDFW must be consulted through the CEQA process as a trustee agency. CESA authorizes CDFW to enter into a memorandum of understanding with individuals, public agencies, universities, zoological gardens, and scientific or educational institutions to import, export, take, or possess species for scientific, educational, or management purposes. LAWA, as the lead agency under CEQA, is required to consult with CDFW regarding the potential for the proposed Project to result in significant impacts on state-listed endangered, threatened, or candidate species.

The California Fish and Game Code classifies some species as "fully protected," and "take" of these species is generally prohibited.[8] In 2011, legislation amended the Fish and Game Code to allow "take" of fully protected species covered under approved natural community conservation plans.

The California Native Plant Protection Act (NPPA) includes measures to preserve, protect, and enhance endangered and rare native plants.[9] The NPPA definitions of endangered and rare differ from those contained in CESA; however, the list of native plants afforded protection by NPPA includes those listed as endangered and threatened under CESA. The NPPA specifies that no person shall import into this state, or take, possess, or sell within this state any endangered or rare native plant, except in compliance with provisions of NPPA.[10] Individual

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5 State CEQA Guidelines, Section 15064, and *National Parks and Conservation Assn v. County of Riverside* (1999) 71 Cal. App. 4th 1341.

6 Endangered Species Act of 1973, as amended, 16 U.S.C., Sections 1531 - 1544.

7 California Endangered Species Act, Fish and Game Code, Section 2050 et. seq.

8 California Fish and Game Code, Sections 3511, 4700, 5050, and 5515.

9 California Native Plant Protection Act, Fish and Game Code, Sections 1900 - 1913.

10 California Native Plant Protection Act, Fish and Game Code, Section 1908.

landowners who have been notified by CDFW of the presence of a rare or endangered plant are required to notify CDFW at least 10 days in advance of changing land uses to allow CDFW to salvage any endangered or rare native plant material.[11]

The Migratory Bird Treaty Act (MBTA) makes it unlawful to pursue, capture, kill, or possess or attempt to do the same to any migratory bird or part, nest, or egg of such bird listed in wildlife protection treaties between the United States and Great Britain, Mexico, Japan, and the former Soviet Union (now Russia).[12] Migratory birds are those species that breed in latitudes different from those in which they winter. Due to its coastal location, LAX is positioned within the migratory path called the Pacific Flyway and open areas within the LAX boundary potentially provide habitat for migratory birds.

Provisions of the federal Coastal Zone Management Act of 1972 (CZMA), require states to establish comprehensive programs to designate and manage development within the coastal zone. The California Coastal Act (CCA) grants authority to the California Coastal Commission (CCC) to regulate development and related resource-depleting activities in a defined coastal zone boundary. Local Coastal Programs (LCPs) are specific long-term management plans prepared by coastal cities and counties and submitted to the CCC for approval. Until the CCC approves the submitted LCP, it retains authority over development within that portion of the coastal zone.

The Los Angeles/El Segundo Dunes has been designated as an Ecologically Sensitive Habitat Area (ESHA) pursuant to Section 30240 of the CCA. The City of Los Angeles has not finalized an LCP that addresses the Los Angeles/El Segundo Dunes for certification by the CCC. Therefore, development within the Los Angeles/El Segundo Dunes is subject to coastal development permit requirements of the CCC.

Jurisdictional waters under the Clean Water Act (CWA) (federal waters) fall into two categories: wetlands and other waters of the U.S. Wetlands include marshes, meadows, seep areas, floodplains, basins, and other areas experiencing inundation or saturation for a duration long enough to support vegetation adapted to saturated soil conditions. The U.S. Army Corps of Engineers (USACE) typically takes jurisdiction over wetlands only when they lie within or adjacent to navigable waters, or tributaries of such waters where those tributaries bear an ordinary high water mark. An ordinary high water mark is defined as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in soil character, destruction of terrestrial vegetation, presence of litter or debris, or other appropriate means that consider the characteristics of the surrounding areas."

Wetlands within the coastal zone are protected by the CZMA and the CCA. CDFW regulates alterations to the flow, bed, channel, or bank of rivers, streams, and lakes. The Fish and Game Code, Section 1600 states, unless proper coordination occurs and requirements are met:

> An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material

[11] California Native Plant Protection Act, Fish and Game Code, Section 1913.

[12] Migratory Bird Treaty Act, 16 U.S.C. Sections 703-712, as amended.

> containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.[13]

Recognizing the potential hazards wildlife pose to aircraft and human lives, the FAA requires airports that incur bird-aircraft strikes to implement a Wildlife Hazard Management Plan (WHMP).[14] LAX developed a WHMP in cooperation with the United States Department of Agriculture-Wildlife Services (USDA-WS), which is periodically reviewed and amended with the approval of FAA. Consistent with the WHMP and FAA guidelines regarding hazardous wildlife attractants on or near airports,[15] the Air Operations Area (AOA) is subject to active control of wildlife species that may pose an aircraft strike risk. Additional wildlife attractants (e.g., lakes, ponds, landfills, etc.) within five miles of the airfield are also addressed as they could potentially attract wildlife in a manner that could jeopardize the safety of air traffic operating into and out of LAX.

4.2.3.2 Plant Communities

LAX and associated facilities are largely developed, and the majority of the undeveloped areas support ruderal and ornamental vegetation. All plant communities within the DSA have global and state rarity rankings of G4/S4, respectively or higher. According to CDFW, only plant communities with a ranking of S1, S2, or S3 are considered a sensitive plant community with a ranking of S1 being the most sensitive rank. A plant community with a rank higher than S3 is not considered a sensitive plant community. Eleven distinct mapping units were used to characterize plant communities and disturbed or developed areas within the proposed Project area; plant community locations and site photographs are provided in Appendix C.

California Bulrush Marsh. Approximately 0.55-acre of the proposed Project was classified as California Bulrush Marsh. This area was confined to the Argo Ditch and was dominated by California bulrush (*Schoenoplectus californicus*). This community corresponds to the *Schoenoplectus californicus* Alliance (52.114.00), which has a global rarity ranking of G5 and state rarity ranking of S4.[16] This plant community may also be classified as Coastal and valley freshwater marsh (52410).

Cattail Marsh. Approximately 0.01-acre of the proposed Project was classified as Cattail Marsh. This area was confined to the Argo Ditch and was dominated by broad-leaf cattail (*Typha latifolia*). This community corresponds to the *Typha (angustifolia, domingensis, latifolia)*

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13 State of California, California Department of Fish and Wildlife, *Fish and Game Code Sections 1600-1616*. Effective January 1, 2004.

14 14 CFR 139.337(e), Wildlife Hazard Management.

15 U.S. Department of Transportation, Federal Aviation Administration, *Advisory Circular 150/5200-33B, Hazardous Wildlife Attractants on or Near Airports*, 2007.

16 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

Alliance (52.050.00), which has a global and state rarity ranking of S5.[17] This plant community may also be classified as Coast and Valley freshwater marsh (52410).

Perennial Ryegrass Field. Approximately 0.67-acre of the proposed Project was classified as Perennial Ryegrass Field. This area was confined to the Argo Ditch and was dominated by perennial rye-grass (*Festuca perrenis*). This community corresponds to the *Festuca perennis* Semi-natural Stands (41.321.00), which does not have a global or state rarity ranking.[18] This plant community may also be classified as Non-Native Grassland (42200).

Sandbar Willow Thicket. Approximately 0.14-acre of the proposed Project was classified as Sandbar Willow Thicket. This area was confined to the Argo Ditch and was dominated by narrow-leaf willow (*Salix exigua* cf. var. *hindsiana*). This community corresponds to the *Salix exigua* Alliance (61.209.00), which has a global rarity ranking of G5 and a state rarity ranking of S4.[19] This plant community may also be classified as Southern Willow Scrub (63300).

Smartweed-Cocklebur Patch. Approximately 0.25-acre of the proposed Project was classified as Smartweed-Cocklebur Patch. This area was confined to the Argo Ditch and was dominated by common knotweed (*Persicaria lapathifolia*). This community corresponds to the *Persicaria lapthifolia – Xanthium strumarium* Provisional Alliance (42.207.00), which has a global and state rarity ranking of G4/S4.[20] This plant community may also be classified as Coastal and Valley Freshwater Marsh (52410).

Yellow Starthistle Field. Approximately 1.73 acres of the proposed Project were classified as Yellow Starthistle Field. This area was confined to the Argo Ditch and was dominated by yellow starthistle (*Centaurea solstitialis*) and brome species (*Bromus* sp.). This community corresponds to the *Centaurea (solstitialis, meletensis)* Semi-natural Stands (42.042.00), which does not have a global or state rarity ranking.[21] This plant community may also be classified as Non-native Grassland (42200).

Disturbed/Annual Brome Grassland. Vegetation characteristic of disturbed/Annual Brome Grassland areas can be seen in the large open space area west of and surrounding the runway. Although consistently maintained, vegetation has become established due to the lack of continuous soil impacts. There are approximately 214.76 acres of disturbed/Annual Brome

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17 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

18 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

19 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

20 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

21 California Department of Fish and Wildlife. 2013. Rarefind 4.0: A Database Application for the Use of California Department of Fish and Wildlife Natural Diversity Database. Sacramento, CA. Accessed online, October 2013: http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp.

Grassland plant community in this area. Plant species associated with the disturbed/Annual Brome Grassland plant community were primarily annual non-native species, which included: hottentot fig (*Carpobrotus edulis*), redstem filaree (*Erodium cicutarium*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), and perennial rye-grass (*Lolium multiflorum*). Vegetation in disturbed/Annual Brome Grassland areas has been and will continue to be routinely maintained or removed as part of LAWA's ongoing program to prevent wildlife hazardous to aircraft operations from entering the airfield.

Disturbed Vegetation. Vegetation characteristic of disturbed vegetation areas can be seen in small patches outside runway areas. Soil in disturbed vegetation areas has been frequently and recently placed, moved or removed. There are approximately 33.5 acres of disturbed vegetation plant community in this area. Plant species associated with the disturbed vegetation plant community were primarily annual non-native species, which included: redstem filaree (*Erodium cicutarium*), wild oat (*Avena fatua*), ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis*), and telegraph weed (*Heterotheca grandiflora*). Vegetation in disturbed vegetation areas has been and will continue to be routinely maintained, removed, or covered as part of the ongoing airport construction activities.

Ornamental. Approximately 3.16 acres of the proposed Project was classified as ornamental. These areas were confined to areas along paved city streets and included ornamental plants typically found in landscaping including oleander (*Nerium oleander*) and Mexican fan palm (*Washingtonia robusta*).

Existing Construction Area. Existing construction areas within the proposed Project site occupy approximately 61.99 acres and consist of existing staging areas or other areas where construction activities are currently taking place. The grading, excavating, or movement of construction equipment within this community makes it difficult for vegetation to establish.

Developed. Developed areas within the proposed Project site occupy approximately 202.57 acres and consist of paved areas and man-made structures such as runways; taxiways; roads; buildings; airfield signage; navigational equipment; and runway, taxiway, and airfield lighting. The hardscape associated with this community make it unsuitable to support vegetation.

4.2.3.3 Plants

Seventy-four plant species from 31 families were identified during the surveys. Thirty-two of the identified plant species are native to California, with the remaining 42 plant species being non-native. Non-native plants dominated most of the surveyed area in and around the runways and staging areas, with native patches occurring sporadically along the Argo Ditch. This may be due to the continual disturbance regime that occurs throughout the proposed Project area and the presence of water in the Argo Ditch. Human presence is limited to authorized personnel and is frequent in the proposed Project area.

4.2.3.4 Wildlife

Twenty-four wildlife species were observed during the 2013 surveys. There were 2 insect species, 3 reptile species, 18 bird species, and 1 mammal species recorded at the proposed Project site (Appendix C). Overall, the abundance of wildlife was considered low with flying wildlife, such as butterflies and birds, accounting for most wildlife observations. Terrestrial wildlife was limited to a handful of reptile and mammal species observations. No fish or

amphibian species were observed during the surveys. Degraded small mammal burrows were observed near Runway 6L-24R but none showed signs of recent activity. A pair of red foxes (*Vulpes vulpes*) along with their burrow was observed on the southeastern-most portion of the survey area, which is located at the corner of Aviation Boulevard and Imperial Highway. Blackbirds were observed within the Argo Ditch and displayed breeding behavior during late spring but were not observed during subsequent visits in the mid- to late summer; these species were assumed to have attempted to nest, but no nests were detected during surveys. Small migratory birds, such as the common yellowthroat (*Geothlypis trichas*), were observed during mid- to late summer surveys within the vegetated portions of the Argo Ditch; therefore, some nesting of small, wetland bird species may be occurring annually. A single burrowing owl along with its burrow was observed just south of Westchester Parkway near the intersection of Westchester Parkway and Northside Parkway.

4.2.3.5 Protected Species

This section considers species protected under FESA and CESA, as evaluated in the LAX Master Plan. A comprehensive understanding of the potential for occurrence of protected species was obtained through consultation with resource specialists and available information from resource management plans, and other technical documents containing information on locations and types of biological resources that have the potential to exist within the DSA. Some of these resources included the United States Fish and Wildlife Service (USFWS) Critical Habitat Mapper and File[22] data and the Carlsbad Field Office Species List for Los Angeles County. The CDFW Natural Diversity Database[23] and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants[24] file data were also queried for records of occurrence of special-status species and habitats within the Venice and Inglewood U.S. Geological Survey (USGS) 7.5-minute Topographic Quadrangle Map.[25] As a result of the literature review and database searches, 96 sensitive plant and wildlife species were identified within the Venice USGS 7.5-minute series topographic quadrangle or adjacent quadrangles. Twenty-seven of the 96 species identified during the database search are analyzed in this EIR, comprising 21 federal-listed species, 3 state listed species, 1 federal candidate species, and 2 other sensitive species.

Listed Plant Species

Table 4.2-1 identifies the listed plants species with potential for occurrence within the DSA. All 11 of the federally-listed sensitive plant species and 1 state-listed sensitive plant species that were identified as potentially occurring in the vicinity of the proposed Project area were determined to be absent as a result of directed surveys. An account of each of these species and distributions of extant populations of sensitive species and critical habitat near the proposed Project are mapped in Appendix C.

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22 U.S. Fish and Wildlife Service. *Critical Habitat Portal website*, http://criticalhabitat.fws.gov/crithab/, accessed March 2012.

23 California Department of Fish and Game, *California Natural Diversity Database*, 2012.

24 California Native Plant Society, *CNPS Electronic Inventory of Rare and Endangered Plants*, 2012.

25 U.S. Geological Service, 7.*5 Minute Venice and Inglewood Quadrangle Maps*, 1981.

Table 4.2-1

Listed Plant Species Potential for Occurrence within the DSA (1 of 2)

Name	Status	Habitat	Survey Results
Marsh sandwort *Arenaria paludicola*	FE, SE, CNPS 1B.2	Freshwater marsh, marsh and swamp, wetland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 6.3 miles northeast of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Braunton's milk-vetch *Astragalus brauntonii*	FE CNPS 1B.1	Chaparral, closed-cone coniferous forest, coastal scrub, limestone, valley and foothill grassland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 6.3 miles northeast of the proposed Project. The nearest critical habitat is located approximately 10 miles to the northwest.
Ventura Marsh milk-vetch *Astragalus pycnostachyus var. lanosissimus*	FE, SE, CNPS 1B.1 Egregious	Marsh and swamp, salt marsh, wetland	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 2.8 miles northwest of the proposed Project. The nearest critical habitat is located approximately 49 miles to the northwest.
Coastal dunes milk-vetch *Astragalus tener var. titi*	FE, SE, CNPS 1B.1	Coastal bluff scrub, coastal dunes	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 2.2 miles northeast of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
San Fernando Valley spineflower *Chorizanthe parryi var. Fernandina*	FC, SE, CNPS 1B.1	Coastal scrub	Determined to be absent. There is no suitable habitat within the Project t area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 1.8 miles northwest of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Salt marsh bird's-beak *Chloropyron maritimum ssp. Maritimum*	FE, SE, CNPS 1B.1	Coastal dunes, marsh and swamp, salt marsh, wetland	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 5.7 miles northwest of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Beach spectaclepod *Dithyrea maritime*	ST CNPS 1B.1	Coastal dunes, Coastal scrub	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 1.8 miles northwest of the proposed Project.
Santa Monica dudleya *Dudleya cymosa ssp. Ovatifolia*	FT, CNPS 1B.2	Chaparral, coastal scrub	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 12.5 miles northwest of the proposed Project. Currently, there is no established or proposed critical habitat for this species.

Table 4.2-1

Listed Plant Species Potential for Occurrence within the DSA (1 of 2)

Name	Status	Habitat	Survey Results
Gambel's water cress *Nasturtium gambelii*	FE, ST, CNPS 1B.1	Brackish marsh, freshwater marsh, marsh and swamp, wetland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 6.3 miles northeast of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Spreading navarretia *Navarretia fossalis*	FT, CNPS 1B.1	Alkali playa, chenopod scrub, marsh and swamp, vernal pool, wetland	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 2.8 miles east of the proposed Project. The nearest critical habitat is located approximately 35 miles to the north.
California Orcutt grass *Orcuttia californica*	FE, SE, CNPS 1B.1	Vernal pool, wetland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 6 miles southeast of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Lyon's pentachaeta *Pentachaeta lyonii*	FE, SE, CNPS 1B.1	Chaparral, coastal scrub, valley and foothill grassland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 14.1 miles southeast of the proposed Project. The nearest critical habitat is located approximately 20 miles to the northwest.

Notes: CNDDB = California Natural Diversity Database; CNPS = California Native Plant Society; FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; SE = State Endangered; ST = State Threatened
Critical Habitat Is Only Afforded To Those Species That Are Listed Under The Federal Endangered Species Act As Endangered Or Threatened.
CNPS California Rare Plant Rank Categories:
List 1b: Rare, Threatened, Or Endangered In California And Elsewhere
0.1: Seriously Endangered In California
0.2: Fairly Endangered In California
0.3: Not Very Endangered In California
List 2: Rare, Threatened, Or Endangered In California, But More Common Elsewhere
0.2: Fairly Endangered In California
List 3: Review List, More Information Required
List 4: Limited Distribution (Watch List)
0.1: Seriously Endangered In California
0.2: Fairly Endangered In California
0.3: Not Very Endangered In California

Source: Sapphos Environmental Inc. January 2001. Technical Report LAX Master Plan EIS/EIR, 7. Biological Resources, Memoranda for the Record on Floral and Faunal Surveys.
Prepared by: Ricondo & Associates, Inc., January 2014.

Candidate Plant Species

Table 4.2-2 identifies candidate plants species with potential for occurrence within the DSA. One federal candidate plant species was identified as potentially occurring in the vicinity of the proposed Project area and was determined to be absent as a result of directed surveys. An account of the species and distributions of extant populations of sensitive species are mapped in Appendix C.

Other Sensitive Plant Species

Table 4.2-3 identifies other sensitive plants species with potential for occurrence within the DSA. One other sensitive plant species, Lewis' evening primrose (*Camissoniopsis lewisii*), was observed at the western end of the DSA. The species is listed as having a CNPS ranking of 3 and has been observed during previous surveys conducted on LAX. An account of the species and distributions of extant populations of sensitive species are mapped in Appendix C.

Listed Wildlife Species

All ten of the federally-listed sensitive wildlife species and two state listed sensitive species that were identified as potentially occurring in the vicinity of the proposed Project area were determined to be absent as a result of directed surveys. **Table 4.2-4** lists the wildlife species initially identified as having the potential to occur within the DSA. Occupied habitat for two species, El Segundo blue butterfly and coastal California gnatcatcher, is present in close proximity to the proposed Project area. An account of each of these species and ddistributions of extant populations of sensitive species and critical habitat near the proposed Project are mapped in Appendix C.

Other Sensitive Wildlife Species

Table 4.2-5 identifies other sensitive plants species with potential for occurrence within the DSA. One other sensitive wildlife species, burrowing owl (*Athene cunicularia*), was observed at the northern end of the DSA. The species is listed as having a federal status of BCC and state status of SSC and has been observed during previous surveys conducted on LAX. An account of the species and distributions of extant populations of sensitive species are mapped in Appendix C.

Table 4.2-2

Candidate Plant Species Potential for Occurrence within the DSA

Name	Status	Habitat	Survey Results
		Invertebrates	
Brand's star phacelia *Phacelia stellaris*	FC CNPS 1B.1	Coastal dunes, coastal scrub	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the nearby Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 0.2 miles west of the proposed Project.

Notes: CNDDB = California Natural Diversity Database; CNPS = California Native Plant Society; FC = Federal Candidate
Critical Habitat Is Only Afforded To Those Species That Are Listed Under The Federal Endangered Species Act As Endangered Or Threatened.
CNPS California Rare Plant Rank Categories:

List 1b: Rare, Threatened, Or Endangered In California And Elsewhere
- 0.1: Seriously Endangered In California
- 0.2: Fairly Endangered In California
- 0.3: Not Very Endangered In California

Source: Sapphos Environmental Inc. January 2001. Technical Report LAX Master Plan EIS/EIR, 7. Biological Resources, Memoranda for the Record on Floral and Faunal Surveys.
Prepared by: Ricondo & Associates, Inc., January 2014.

Table 4.2-3

Other Sensitive Plant Species Potential for Occurrence within the DSA

Name	Status	Habitat	Survey Results
		Invertebrates	
Lewis' evening primrose *Camissoniopsis lewisii*	CNPS 3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland	Determined to be present. There is suitable habitat within the Project area. The species was observed in the westernmost area of the proposed Project, enclosed by the two runways and taxiways. Previously detected in Spring 1998 near western end of north runway.

Notes: CNPS = California Native Plant Society;
Critical Habitat Is Only Afforded To Those Species That Are Listed Under The Federal Endangered Species Act As Endangered Or Threatened.

CNPS California Rare Plant Rank Categories:

List 3: Review List, More Information Required

Source: Sapphos Environmental Inc. January 2001. Technical Report LAX Master Plan EIS/EIR, 7. Biological Resources, Memoranda for the Record on Floral and Faunal Surveys.
Prepared by: Ricondo & Associates, Inc., January 2014.

Table 4.2-4

Listed Wildlife Species Potential for Occurrence within the DSA

Name	Status	Habitat	Survey Results
		Invertebrates	
El Segundo blue butterfly *Euphilotes battoides allyni*	FE	Coastal sand dunes with coastal buckwheat.	Determined to be absent. Known to be present in the vicinity. Determined to be absent in the Project area. There is no suitable habitat within the Project area. The species was not observed in the Project area during 2013 biological surveys or previous surveys in the Project area. Occupied habitat is limited to the nearby Los Angeles/El Segundo Dunes, approximately 0.6 mile south of the proposed Project, as documented in the CNDDB.
Palos Verdes blue butterfly *Glaucopsyche lygdamus palosverdesensis*	FE	Coastal scrub	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 9.8 miles south of the proposed Project. The nearest critical habitat is located approximately 10 miles to the northwest.
		Fish	
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus*	FE, SSC	Aquatic, south coast flowing waters	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 12 miles northwest of the proposed Project. The nearest critical habitat is located approximately 10 miles to the northwest.
Mohave tui chub *Siphateles bicolor mohavensis*	FE, SE, FP	Aquatic, artificial flowing waters, artificial standing waters	Determined to be absent. There is no suitable habitat within the Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 12 miles southeast of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
		Birds	
Western snowy plover *Charadrius alexandrinus nivosus*	FT, SSC, BCC	Great Basin standing waters, sand shore, wetland	Determined to be absent. There is no suitable habitat within the project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 0.8 mile northwest of the proposed Project. The nearest critical habitat is located approximately 1,000 feet to the west. Known to nest on Dockweiler State Beach where a protective enclosure exists for their nesting.
Southwestern willow flycatcher *Empidonax traillii extimus*	FE, SE	Riparian woodland	Determined to be absent. There is no suitable habitat within the project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 10.6 miles southeast of the proposed Project. The nearest critical habitat is located approximately 22 miles to the north.
Belding's savannah sparrow *Passerculus sandwichei*	SE	Marsh and Swamp, Wetland	Determined to be absent. There is no suitable habitat within the project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 1.2 miles northwest of the Project.
		Birds	
Coastal California gnatcatcher *Polioptila californica*	FT, SSC	Coastal bluff scrub, coastal scrub	Determined to be absent. Known to be present in the vicinity. Determined to be absent in the Project area. There is no suitable habitat within the Project area. The species was not observed in the Project area during 2013 biological surveys or previous surveys in the Project area. Occupied habitat is limited to the nearby Los Angeles/El Segundo Dunes, approximately

Table 4.2-4

Listed Wildlife Species Potential for Occurrence within the DSA

Name	Status	Habitat	Survey Results
californica			2.8 miles northeast of the proposed Project, as documented in the CNDDB. The nearest critical habitat is located approximately 10 miles to the south.
Bank Swallow *Riparia riparia*	ST	Riparian Scrub, Riparian Woodland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 7.4 miles northwest of the proposed Project.
California least tern *Sternula antillarum browni*	FE, SE, FP	Alkali playa, wetland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 1.2 miles northwest of the proposed Project. Currently, there is no established or proposed critical habitat for this species.
Least Bell's vireo *Vireo bellii pusillus*	FE, SE	Riparian forest, riparian scrub, riparian woodland	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Nearest CNDDB record is located approximately 14.7 miles northeast of the proposed Project. The nearest critical habitat is located approximately 35 miles to the north.
Mammals			
Pacific pocket mouse Perognathus longimembris pacificus	FE, SSC	Coastal scrub	Determined to be absent. There is no suitable habitat within the proposed Project area. The species was not observed during 2013 biological surveys or previous surveys. Potentially suitable habitat is limited to the Los Angeles/El Segundo Dunes. Nearest CNDDB record is located approximately 1.1 miles south of the proposed Project. Currently, there is no designated or proposed critical habitat for this species.

Notes: CNDDB = California Natural Diversity Database; CNPS = California Native Plant Society; FE = Federally Endangered; FT = Federally Threatened; FC = Federal Candidate; FD = Federally Delisted; BCC = Birds Of Conservation Concern; SE = State Endangered; ST = State Threatened; SSC = State Species Of Special Concern; FP = State Fully Protected; SD = State Delisted

Critical Habitat Is Only Afforded To Those Species That Are Listed Under The Federal Endangered Species Act As Endangered Or Threatened.

Source: Sapphos Environmental Inc. January 2001. Technical Report LAX Master Plan EIS/EIR, 7. Biological Resources, Memoranda for the Record on Floral and Faunal Surveys. Glenn Lukos Associates. July 2012. Appendix D-1 LAX Specific Plan Amendment Study, Floral and Faunal Compendium and Sensitive Plants and Wildlife. Frank Hovore & Associates. September 28, 1998. Report of sensitive arthropod surveys, Los Angeles International Airport 2015 Master Plan Study Area, 1996-1998.

Prepared by: Ricondo & Associates, Inc., January, 2014.

Table 4.2-5

Other Sensitive Wildlife Species Potential for Occurrence within the DSA

Name	Status	Habitat	Survey Results
		Invertebrates	
Burrowing owl *Athena cunicularia*	BCC, SCC	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland	Determined to be present. There is suitable habitat within the proposed Project area. The species was observed in the northern area of the proposed Project, enclosed by the two runways and taxiways. Previously detected in 2012 on the western and northern areas of the north airfield. Nearest CNDDB record is approximately 1.4 miles north of the proposed Project.

Notes: CNDDB = California Natural Diversity Database; BCC = Birds Of Conservation Concern; SSC = State Species Of Special Concern
Critical Habitat Is Only Afforded To Those Species That Are Listed Under The Federal Endangered Species Act As Endangered Or Threatened.

Source: Sapphos Environmental Inc. January 2001. Technical Report LAX Master Plan EIS/EIR, 7. Biological Resources, Memoranda for the Record on Floral and Faunal Surveys. Glenn Lukos Associates. July 2012. Appendix D-1 LAX Specific Plan Amendment Study, Floral and Faunal Compendium and Sensitive Plants and Wildlife. Frank Hovore & Associates. September 28, 1998. Report of sensitive arthropod surveys, Los Angeles International Airport 2015 Master Plan Study Area, 1996-1998.

Prepared by: Ricondo & Associates, Inc., January, 2014.

4.2.3.5 Jurisdictional Waters

The Argo Ditch is identified in the NWI as an excavated riverine, intermittent, streambed with a temporary flooded water regime. It is a man-made flood control structure constructed circa 1949 and falls under the jurisdiction of USACE and CDFW. As of 1998, USACE exerted jurisdiction over the Argo Ditch because although it does not connect to any river, stream, or lake, it ultimately discharges to the Pacific Ocean, which is a navigable water body pursuant to Section 404 of the Federal Clean Water Act. A jurisdictional delineation report was completed in August 2013 for the Argo Ditch and included a review of two previous delineations of the Argo Ditch, summarized below.

1997 Delineation

The 1997 jurisdictional delineation of the Argo Ditch was completed in support of emergency channel maintenance activities in October 1997. Sampling for wetland vegetation, hydrology, and soil occurred every 100 feet for a total of 99 locations. During the 1997 delineation of the Argo Ditch, Sapphos Environmental, Inc., on behalf of LAWA found "riparian and wetland habitat created in association with the Argo Ditch".[26] Wetlands were found within the man-made ditch in limited areas (~1 acre in total), mostly within the eastern portions of the Argo Ditch. Sapphos Environmental, Inc. also documented riparian vegetation dominated by willows but lacking wetlands in the mid-portions of the Argo Ditch.

USACE exerted jurisdiction over isolated wetlands in the Argo Ditch that resulted from a lack of routine operations and maintenance activities over an approximate 20-year period. LAWA and the FAA consulted with USACE and CDFW in order to perform annual clearing of vegetation and mitigation for the loss of wetlands. USACE authorized emergency operations and maintenance activities pursuant to Nationwide Permit No. 31.[27]

The CDFW issued an agreement on February 9, 1998 which stated that LAWA intended to remove vegetation on a regular basis and continually maintain the Argo Ditch to be "clear of vegetation until a permanent solution can be established".[28] This agreement also required mitigation for the loss of wetland vegetation. To mitigate for the loss of 0.99-acre of wetlands delineated in 1997, a restoration site was created at Ken Malloy Harbor Regional Park (KMHRP). USACE determined that mitigation was complete and successful on December 9, 2004.[29]

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[26] Sapphos Environmental, Inc. *Preliminary Results of Delineation of Areas Subject to the Jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game at Argo Ditch*, Los Angeles International Airport, City of Los Angeles, California.

[27] U.S. Army Corp of Engineers. 7 Jan. 1998. Letter to Mr. Driscoll regarding the Department of the Army Nationwide Permit Authorization.

[28] California Department of Fish and Game. 9 Feb. 1998. Notification No. 5-480-97 (revision 2). Agreement Regarding Proposed Alteration to Argo Ditch. Executed by Mr. John Driscoll, Executive Director, Los Angeles World Airports, and Ms. Leslie McNair, Environmental Specialist II, California Department of Fish and Game.

[29] U.S. Army Corp of Engineers. 9 Dec. 2004. Letter to Mr. Brown regarding the status of wetland mitigation. December 9, 2004.

2011 Delineation

On July 7, 2011, a second delineation was conducted on behalf of LAWA at 15 locations along the Argo Ditch in support of the LAX Specific Plan Amendment Study. Wetlands determined during this delineation occurred primarily within the eastern portions of the Argo Ditch Wetlands were delineated to be 3.78 acres, of which approximately 2.45 acres consisted of non-wetland waters of the United States, and approximately 1.33 acres consisted of jurisdictional wetlands. Water within the ditch originated from "storm discharge and nuisance flow" and "the wettest areas are concentrated at the discharge points".[30] Further, potential areas subject to the CDFW jurisdiction was 3.97 acres, of which 1.52 acres consisted of riparian vegetation.

2013 Delineation

In conjunction with the proposed Project, Sapphos Environmental, Inc. delineated seven wetlands within the man-made Argo Ditch for a total of 1.02 acres of wetlands (see **Exhibit 4.2-3**). Most of these wetlands were associated with culverts or concrete areas within the Argo Ditch. All of these wetlands were within the man-made ditch and subjected to periodic clearing of vegetation under current permits. Of the 1.02 acres of wetlands delineated during the 2013 study, approximately 0.09 acres of these wetlands were determined to be subject to permanent impacts as a result of conversion from an earthen-bottom open flood control channel to a covered concrete box flood control channel. Wetland delineation locations and site photographs are provided in Appendix D.

Six plant communities were detected during the field surveys. Eighteen of the 53 sampled points were classified as wetlands. Of these 18 points, only 2 had hydric soil indicators and the remainder had indicators for Problematic Hydric Soils, such as standing water in August. During the third delineation conducted in December 2013, 16 of the wetland points were classified as wetlands based on the Problematic Hydric Soils section of the Regional Supplement Wetland Delineation Manual (WDM).

LAWA's Wildlife Hazard Management Plan calls for "the vegetation that grows alongside and in the Argo Ditch on LAX property [to] be removed and maintained so that habitat is not provided for waterfowl, herons, blackbirds, and other wildlife that could present a direct or indirect hazard to aviation. Vegetation within the Argo Ditch should be cleared regularly so that vegetation remains below 3 feet tall, thereby reducing potential roosting, foraging, and nesting habitat." Clearing is recommended outside of the breeding season, which is typically February 15 to August 15, but some maintenance of the vegetation would be necessary during the breeding season because wetland plants grow quickly and can obtain heights suitable for birds within 1 to 2 months after clearing.

[30] Glenn Lukos Associates, *Jurisdictional Delineation,* July 2012.

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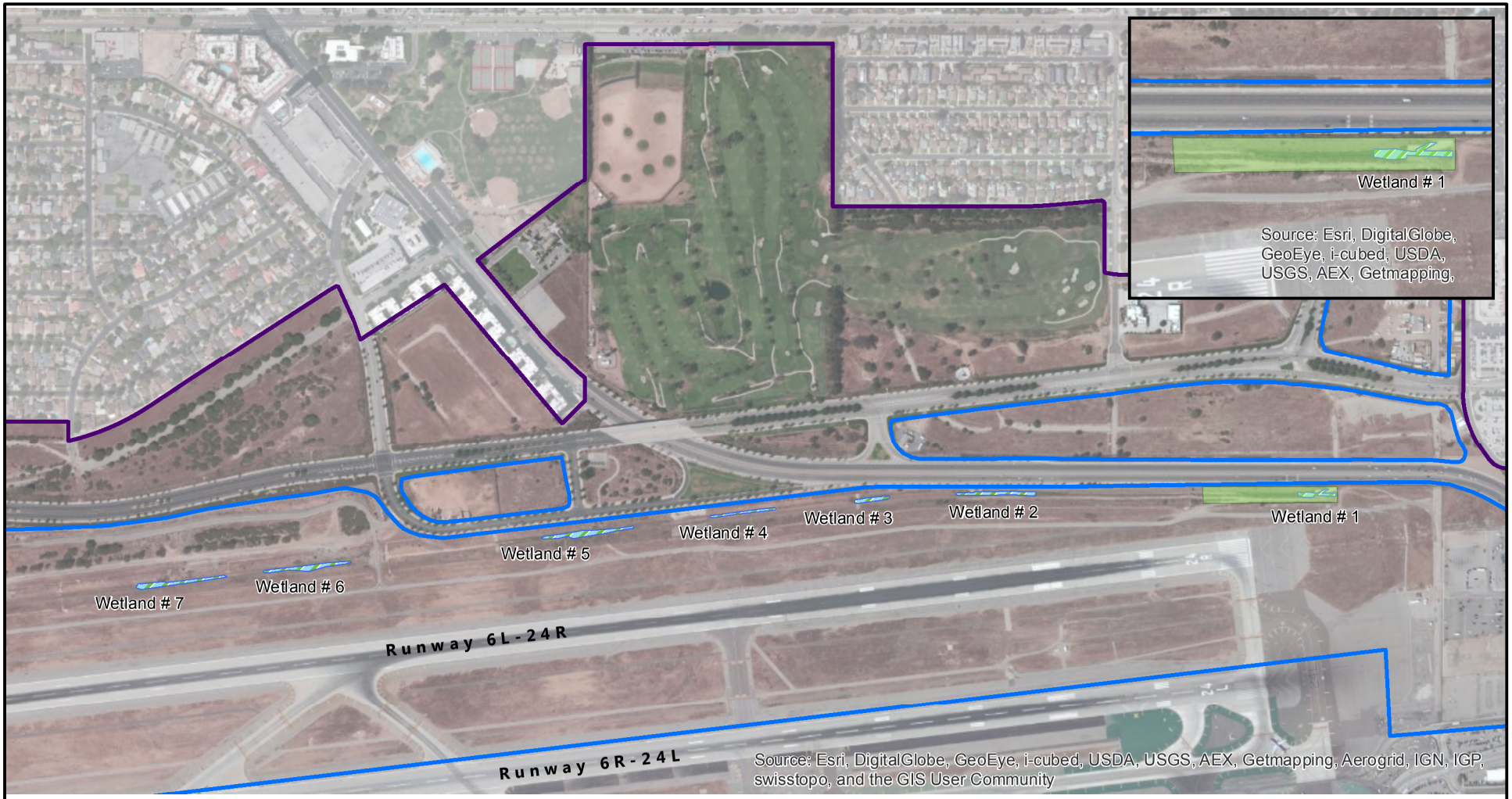

0 800 ft.
Scale
north

Source: Los Angeles County, 2010, 2011 (city boundary, streets); LAX Airport Layout Plan, Ricondo & Associates, Inc., 2010; ESRI Aerial Imagery, 2014; Sapphos Environmental, Inc., Jurisdictional Delineation Report, Los Angeles International Airport, Proposed Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Project, January 2014.
Prepared by: Ricondo & Associates, Inc., May 2014.

Legend

- LAX Property
- Generalized Study Area
- Detailed Study Area
- 2013 Delineated Wetland
- Proposed Covered Argo Ditch Area

LAX Runway 6L-24R and Runway 6R-24L Runway Safety Area and Associated Improvements Draft EIR

2013 Delineated Wetlands

Figure
4.2-3

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4.2.4 Thresholds of Significance

Significant impacts to biological resources would occur if direct and indirect changes in the environment, which may be caused by the proposed Project, potentially could result in one or more of the following future conditions:

- A substantial reduction (greater than 10 percent) in locally designated natural communities including state-designated sensitive habitats, ESHAs, and habitat preservation areas designated pursuant to local ordinances. Specifically, a substantial reduction (greater than 10 percent) in the Habitat Restoration Area (designated as such by City of Los Angeles Ordinance 167940).
- A conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plans.
- A substantial net reduction in federal- or state-listed or otherwise sensitive plants, pursuant to the California Native Plant Protection Act (CNPPA).
- Interference with habitat (e.g., from the introduction of noise, light) such that normal species behaviors are disturbed to a degree that may diminish the chances for long-term survival of a sensitive species, pursuant to the L.A. CEQA Thresholds Guide.
- A substantial adverse effect, either directly or through habitat modifications, on any candidate, sensitive, or special status species.
- Substantial interference with the movement of any native fish or wildlife species or with established wildlife corridors, or impede the use of a native wildlife nursery site.
- Removal of occupied nesting habitat during the breeding season (March 15 to August 15) or harassment of any bird species afforded protection under the MBTA.
- A significant reduction (greater than 10 percent) of a biological resource designated as sensitive by the CZMA. Specifically, a reduction in size of the Habitat Restoration Area or the encompassing Los Angeles/El Segundo Dunes, including adjacent open areas. These thresholds were adapted from criteria and guidance contained in the MBTA, the CZMA, the L.A. CEQA Thresholds Guide, and the CNPPA. These guidelines are also consistent with Appendix G of the State CEQA Guidelines.
- Adversely affect the function of a wetland to protect the quality or quantity of municipal water supplies, including sole source, potable water aquifers.
- Substantially alter the hydrology needed to sustain the functions and values of the affected wetland or any wetlands to which it is connected.
- Substantially reduce the affected wetland's ability to retain floodwaters or storm-associated runoff, thereby threatening public health, safety or welfare.
- Adversely affect the maintenance of natural systems that support wildlife and fish habitat or economically-important timber, food, or fiber resources in the affected or surrounding wetlands.
- Promote the development of secondary activities or services that would affect the resources identified in the previous 4 bullets.

- Would be inconsistent with applicable State wetland strategies.

These Thresholds of Significance are utilized because they address the potential concerns relative to biotic communities associated with the LAX Master Plan; namely, the reduction or take of sensitive flora, fauna, or habitat. An evaluation of whether or not an impact on biological resources would qualify as significant must consider both the resource itself and how that resource fits into a regional context. The criteria for determining significance of impacts are based on the importance of the resource, the proximity of the resource to the Project site, the proportion of the resource that would be affected, the sensitivity of the resource to the type of impact being considered, and the extent and degree of the proposed impact.

4.2.5 Applicable LAX Master Plan Commitments and Mitigation Measures

As part of the LAX Master Plan, LAWA adopted a number of mitigation measures pertaining to biotic communities (denoted with "BC") and endangered and threatened species (denoted with "ET") in the Alternative D Mitigation Monitoring and Reporting Program (MMRP).[31] The mitigation measures listed below are relevant to the analysis of biological resources associated with the proposed Project. Since the Project site is located within the LAX Master Plan boundaries, LAWA will also fulfill the commitments it has made in the LAX Master Plan for the proposed Project. The following commitments are applicable to the proposed Project and are considered in the Biological Resources analysis herein.

- **MM-BC-1. Conservation of State-Designated Sensitive Habitat within and Adjacent to the El Segundo Blue Butterfly Habitat Restoration Area.**

  LAWA or its designee shall take all necessary steps 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. These steps shall, at a minimum, include the following:

  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, LAWA or its designee shall conduct a pre-construction evaluation to identify and flag specific areas of state-designated sensitive habitats located within 100 feet of construction areas. Subsequent to the pre-construction evaluation, LAWA or its designee shall conduct a pre-construction meeting and provide written construction 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

[31] City of Los Angeles, Los Angeles World Airports, *LAX Master Plan, Alternative D, Mitigation Monitoring & Reporting Plan*, April 2004.

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, LAWA shall include a provision 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."

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 Area shall continue to be carried out as prescribed.

- **MM-BC-2. Conservation of Floral Resources: Lewis' Evening Primrose.**

  LAWA or its designee shall prepare and implement a plan 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. LAWA or its designee shall collect seed 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 MM-BC-13. Collected seed shall be broadcast (distributed) after the first wetting rain. LAWA or its designee shall implement a monitoring plan 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 MM-BC-8.

- **MM-ET-3. El Segundo Blue Butterfly Conservation: Dust Control.**

  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 with a goal to reduce fugitive dust emissions by 90 to 95 percent during construction activities within 2,000 feet of the El Segundo Blue Butterfly Habitat Restoration Area. In addition, to the extent feasible, no grading or stockpiling for construction activities should take place within 100 feet of occupied habitat of the El Segundo blue butterfly.

The following applicable mitigation measures were included within the Los Angeles International Airport, Bradley West Project, Final EIR and has since been adopted into the LAX MMRP. Due

to the sighting of a burrowing owl just south of Westchester Parkway, this mitigation measure would apply to the Proposed Project.

- **MM-BC (BWP)-4. Conservation of Faunal Resources: Burrowing Owl.**[32, 33]

  Prior to any work activities (i.e., vegetation clearing, invasive species removal and/or spraying, and sediment removal) within the Southeast Construction Staging/Parking Area (also known as the Continental City site), a survey for burrows by a qualified biologist will be conducted by walking through the suitable habitat within the site in accordance with CDFW (formerly CDFG)-accepted protocols. If the site contains burrows that could be used by burrowing owls, four surveys will be conducted during the burrowing owl breeding season (April 15 through July 15). If an active burrow is observed during the nesting season, disturbance of the owls would constitute a significant impact and the burrow will be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owl normally occurs from February 1 through August 31. To protect any active burrow, the following restrictions are required between February 1 and August 31 (or until burrows are no longer active as determined by a qualified biologist): (1) clearing limits will be established a minimum of 300 feet in any direction from any occupied nest and (2) access and surveying will be restricted within 200 feet of any occupied nest. Any encroachment into the 300/200 foot buffer area around the known nest will only be allowed if it is determined by a qualified biologist that the proposed activity will not disturb the nest occupants. These avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Management Plan."

  If nesting individuals are observed, LAWA or its designee will develop and implement a habitat replacement plan to compensate for the loss of habitat associated with use of the site for construction staging and parking. The objective of the habitat replacement plan will be to replace the habitat value to be lost with equal or greater habitat value. The habitat replacement will occur at an off-site location to avoid potential conflicts with aircraft activities at LAX. Off-site locations for habitat replacement may include Madrona Marsh Nature Center in Torrance, Three Sisters Reserve located on the Palos Verdes Peninsula, or another location deemed appropriate. Whether or not any nesting burrowing owls are identified on-site, after the end of the nesting period (August 31), LAWA or its designee will remove all burrows from the site on a monthly basis between September and January. Removal may include physically collapsing the burrows or installing oneway doors in burrow entrances. Such maintenance will continue annually until such time as the entire staging area is in active use.

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[32] City of Los Angeles, Los Angeles World Airports, *Los Angeles International Airport, Bradley West Project, Draft Environmental Impact Report*, May 2009.

[33] MM-BC (BWP)-4 is site specific to the Continental City site due to the Bradley West project specifics, however this Mitigation measure is applicable to the proposed Project DSA due to the single burrowing owl along with its burrow observed just south of Westchester Parkway near the intersection of Westchester Parkway and Northside Parkway which occurred during Biological Assessment site visits as described in Section 4.2.3.4.

MM-BC (BWP)-8. Conservation of Faunal Resources: Nesting Birds/Raptors.

To comply with the Migratory Bird Treaty Act, for those areas of the project site that are not actively maintained and have a potential for nesting birds/raptors, if construction is scheduled to occur during the nesting season for birds/raptors (generally February 1 to June 30 for raptors and March 15 to August 15 for nesting birds), vegetation that will be impacted by the proposed project shall be removed outside the nesting season if feasible. If this is not feasible, then a qualified biologist shall inspect the shrubs/trees prior to project activities to ensure that no nesting birds/raptors are present. If the biologist finds an active nest within the construction area and determines that the nest may be impacted, the biologist will delineate an appropriate buffer zone; the size of the buffer zone will depend on the species and the type of construction activity, and will be determined in consultation with CDFW. Only construction activities (if any) that have been approved by a Biological Monitor will take place within the buffer zone until the nest is vacated. The biologist shall serve as a construction monitor during those periods when construction activities shall occur near active nest areas to ensure that no inadvertent impacts on these nests shall occur. These construction avoidance measures will be coordinated with LAWA's USDA Wildlife Hazard Biologist and will be consistent with FAA Advisory Circular No. 150/5200-33 "Hazardous Wildlife Attractants on or Near Airports" and LAWA's "LAX Wildlife Hazard Mitigation Plan" to avoid increasing wildlife hazards to aircraft.

4.2.6 Impact Analysis

4.2.6.1 Construction

Construction of the proposed Project would result in excavation, grading, and paving of approximately 6.0 undeveloped acres. The areas proposed to be converted to impervious surfaces would consist of disturbed/annual brome grassland, disturbed vegetation, and ornamental vegetation (described in Section 4.2.3.2). These areas contain no sensitive, threatened or endangered plant communities or species and currently have been and will continue to be routinely maintained as part of LAWA's ongoing program to prevent wildlife hazardous to aircraft operations from entering the airfield. No natural systems that support wildlife and fish habitat or economically important resources would be affected by the construction of the proposed Project.

The proposed Project would also involve excavation, grading, and covering a portion of the Argo Ditch approximately 720 feet in length with a concrete box-channel. This would result in removal of 0.09-acre of wetland vegetation within the area previously cleared for channel clearing. No listed species would be impacted as a result of the wetland removal. Wetland removal would be conducted in accordance with Nationwide Permit No 39.

In addition, a portion of the 126.1 acres of undeveloped land and 57.7 acres of developed land located within the DSA would be used as staging areas. These activities will not likely result in impacts to any federally or state-listed threatened or endangered or candidate species, or to other locally sensitive plant, wildlife species or other biological resources. One sensitive plant species, Lewis' evening primrose, was observed in the western end of the DSA. Ground disturbance during construction of the proposed Project would primarily occur in the eastern portion of the DSA, thus, construction of the proposed Project would not result in a substantial

reduction of this plant species. Additionally, MM-BC-2 described in Section 4.2.5 would apply to the proposed Project and be implemented during construction of the Project.

Construction of the proposed Project would be temporary in nature and would not result in a significant change to the DSA, or introduce new noise or light sources. No interference with habitat would occur as a result of construction of the proposed Project that would diminish the chances for long-term survival of a sensitive species.

No established wildlife corridors or native wildlife nursery sites are known to exist within the DSA, thus, the proposed Project would have no impact on these sites or native fish or wildlife species that rely on those sites. Additionally, no biological resources designated as sensitive by CZMA were observed in the DSA during surveys conducted for the Biological Assessment. No impacts to these resources would be anticipated by implementation of the proposed Project.

Nesting Birds

Several species of birds were presumed to be nesting in vegetation along the Argo Ditch based on behavioral cues although no nests were observed. The USFWS has issued a Federal Fish and Wildlife Permit to LAWA for the Depredation of Migratory Birds at Airports, which allows take of native bird species and their nests for those species that are not threatened or endangered. Harassment and/or removal of endangered/threatened species and/or bald and golden eagles require additional permits from the Migratory Bird Permit Office and/or Ecological Services Office. During construction of the proposed Project, occupied nesting habitat during breeding season would be monitored and mitigated by MM-BC (BWP)-8 adopted from the Bradley West Project Final EIR as described in Section 4.2.5. Thus, construction of the proposed Project is anticipated to have no significant impact on nesting birds.

Plants

There are 11 federally listed, 1 state-listed, and 1 federal candidate plant species that were identified as having potential to occur within the DSA. Of these 13 species, none were found to occur in the DSA as a result of general surveys focused on searching for sensitive plant species. Potential impacts to federally-listed or candidate species would not occur from implementation of the proposed Project.

One other sensitive plant species, Lewis' evening primrose, was observed at the western end of the DSA. The species is listed as having a CNPS ranking of 3 and has been observed during previous surveys conducted on LAX. Pre-construction surveys are recommended for Lewis' evening primrose to determine the presence/absence of the species, as specified in MM-BC-2 (see Section 4.2.5). If these species are observed during pre-construction surveys, they will be flagged for avoidance. If individuals cannot be avoided and will be impacted by construction activities, mitigation would occur. Potential impacts to other sensitive plant species are not anticipated as part of the proposed Project; however, the implementation of mitigation measures specified in Section 4.2.5 will ensure that impacts to Lewis' evening primrose are less than significant.

Wildlife

There are 10 federally listed and 2 state-listed wildlife species that were identified during the database search as having potential to occur within the DSA. Of these 12 species, none were

found to occur in the DSA as a result of general surveys focused on searching for sensitive wildlife species. Potential impacts to federally-listed, state-listed, or candidate wildlife species would not occur from implementation of the proposed Project.

One other sensitive wildlife species, burrowing owl, was observed at the north end of the DSA. The species is listed as having a federal status of BCC and state status of SCC and has been observed during previous surveys conducted on LAX. Pre-construction surveys are recommended for burrowing owls to determine the presence/absence of active burrows for the species, as specified in MM-BC (BWP)-4 (see Section 4.2.5). If active burrows for the species are observed during pre-construction surveys, they will be flagged for avoidance. If active burrows cannot be avoided and would be impacted by construction activities, mitigation would occur. Potential impacts to other sensitive wildlife species are not anticipated as part of the proposed Project; however, the implementation of mitigation measures specified in Section 4.2.5 will ensure that impacts to burrowing owl are less than significant.

Jurisdictional Waters

The proposed Project would convert the easternmost portion of the Argo Ditch from a partially earthen-bottom ditch with a 720-foot long concrete apron to a concrete box channel. The 2013 Jurisdictional Delineation of the Argo Ditch identified seven wetland areas within the man-made Argo Ditch for a total of 1.02 acres of wetlands (Appendix D). Most of these wetlands were associated with culverts or concrete areas within the Argo Ditch. All of these wetlands were within the man-made ditch and are subject to periodic clearing of vegetation under current permits.

The proposed Project would result in removal of 0.09 acre of wetland vegetation within the area previously cleared during channel clearing. The Argo Ditch is a man-made flood control structure that falls under the jurisdiction of USACE and CDFW. In 1998, USACE exerted jurisdiction over the Argo Ditch because it ultimately discharges to the storm drainage system, which outfalls to the Pacific Ocean, a navigable water body pursuant to Section 404 of the CWA. USACE and CDFW agreed to allow LAWA to perform clearance of 0.99-acre of vegetation within the Argo Ditch and to maintain the ditch clear of vegetation. Despite regular clearing outside of the breeding season for birds, vegetation periodically regrows. Many of the wetland plants growing within the Argo Ditch are nonnative or weedy species or are associated with early successional wetlands.

During construction of the proposed Project, grading and excavation of the previously delineated 0.09-acre of wetlands would occur. These wetlands would then be covered with the concrete box channel to allow conveyance of the Argo Ditch flow. The proposed Project would be an allowable activity pursuant to Nationwide Permit No 39. The USACE issues nationwide permits for projects that would have a minimal effect on the aquatic environment.

Proceeding under Nationwide Permit No. 39 would require a pre-construction notification to be submitted to the USACE, supported by a jurisdictional delineation and documentation that any required mitigation was completed. No substantial alteration to hydrology, floodwater, or stormwater retention would occur as a reduction of 0.09-acre of wetlands as a result of the proposed Project. Nor would the wetland's ability to protect water quality, or quantity of municipal water supplies occur. Thus, although the proposed Project would impact 0.09-acre of wetlands, it would not have a significant impact on wetlands.

As the Argo Ditch is classified as a riverine streambed, construction of the proposed Project would involve an alteration to the bed of the Argo Ditch. However, as the proposed Project would only involve a 720-foot section of the Argo Ditch (0.09-acre of delineated wetlands); and as described above, no significant impacts to plants or wildlife would occur; the proposed Project would not substantially alter the Argo Ditch streambed. No substantial alteration to hydrology, floodwater, or stormwater retention would occur as a result of construction of the proposed Project. Nor would the wetland's ability to protect water quality, or quantity of municipal water supplies occur. The proposed Project would require coordination with CDFW per CDFW Code, Section 1600 requiring agency regulation of projects that may alter the flow, bed, channel, or bank of rivers, streams, and lakes.[34]

In coordination with state and federal authorities, construction of the proposed Project would have no significant impact on jurisdictional waters. All construction activities for the proposed Project would follow all applicable local, state, and federal permits and regulations.

4.2.6.2 Operations

Implementation of the proposed Project would not cause a change in aircraft operations or routes, or any other operations at LAX. As a result of the Biological Assessment literature review, surveys were undertaken to assess the potential for the proposed Project to affect 24 federally or state-listed endangered or threatened species, 1 federal candidate species, and 2 other sensitive species with the potential to occur in the vicinity of the DSA. Fourteen of the 27 species are plant species and were determined to be absent in the proposed Project area as a result of habitat assessment and focused surveys, with the exception of Lewis' evening primrose. Thirteen of the 27 species are wildlife species and were determined to be absent in the DSA, with the exception of burrowing owl.

The proposed Project would involve covering a portion of the Argo Ditch approximately 720 feet in length with a permanent concrete box-channel. This would result in removal of 0.09-acre of wetland vegetation within the area previously cleared during channel clearing. No listed species would be impacted as a result of the wetland removal. Implementation of the proposed Project would result in converting approximately 6.0 undeveloped acres to impervious surfaces. Areas converted to impervious surfaces would consist of disturbed/annual brome grassland, disturbed vegetation and ornamental vegetation (described in Section 4.2.3.2). These areas contain no sensitive, threatened or endangered plant communities or species and currently have been and will continue to be routinely maintained as part of LAWA's ongoing program to prevent wildlife hazardous to aircraft operations from entering the airfield. No natural systems that support wildlife and fish habitat or economically important resources would be affected by operation of the proposed Project.

The proposed Project would not result in a significant change to the DSA, including the introduction of noise or light sources. No change in aircraft operations or airport operations would occur as a result of the proposed Project. No interference with sensitive habitat would occur as a result of operations of the proposed Project. The proposed Project would not diminish the chances for long-term survival of any sensitive species or its habitats.

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[34] State of California, California Department of Fish and Wildlife, *Fish and Game Code Sections 1600-1616*. Effective January 1, 2004.

No established wildlife corridors or native wildlife nursery sites are known to exist within the DSA. The proposed Project would have no impact on these sites or native fish or wildlife species that rely on those sites. Additionally, no biological resources designated as sensitive by CZMA were observed in the DSA during surveys conducted for the Biological Assessment. No impacts to these resources would be anticipated for operations of the proposed Project.

Proposed Project activities would not likely result in impacts to any federally or state-listed threatened or endangered or candidate species. Additionally, Project activities will not likely result in impacts to other locally sensitive plant or wildlife species.

4.2.7 Cumulative Impacts

LAWA projects would be required to implement BMPs, follow regulations, and apply project design features and LAX Master Plan EIS/EIR Commitments. The proposed Project includes project design features and BMPs specifically designed to reduce biological resources impacts to less than significant. Therefore, impacts related to biological resources under the proposed Project are not cumulatively considerable, and cumulative impacts would be less than significant.

4.2.8 Mitigation Measures

LAWA is committed to mitigating Project impacts to the extent practicable and has established a comprehensive MMRP as part of the LAX Master Plan approvals. Although no significant impacts to biological resources are anticipated to occur from implementation of the proposed Project, LAWA will implement the mitigation measures specified in Section 4.2.5 to ensure that impacts are less than significant.

Development of the proposed Project would be conducted in accordance with Nationwide Permit No. 39, in coordination with the USACE. Mitigation for clearing activities in this section of the Argo Ditch was completed previously. The USACE may require additional mitigation for the impact to the Argo Ditch, which LAWA would fulfill. Additionally, the proposed Project would require coordination with CDFW per the Fish and Game Code, Section 1600 requiring agency regulation of projects that may alter the flow, bed, channel, or bank of rivers, streams, and lakes.

4.2.9 Level of Significance After Mitigation

Impacts of the proposed Project on biological resources are less than significant with mitigation measures and incorporation of applicable LAX Master Plan Commitments, as indicated above in Section 4.2.5.

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