
4.12 Wetlands

4.12.1 Introduction

The wetlands analysis addresses the potential effects to "waters of the United States," including wetlands and other special aquatic habitats protected by the federal government, and to natural rivers, streams, and lakes protected by the State of California. The findings of the *Jurisdictional Delineation*, a determination of areas subject to regulation by the U.S. Army Corp of Engineers (USACOE) pursuant to Section 404 of the Clean Water Act, conducted in support of the LAX Master Plan, are provided in Appendix J2, *Jurisdictional Delineation*, and Technical Report 7, *Biological Resources - Memoranda for the Record on Floral and Faunal Surveys*. Additional information regarding the affected environment relative to wetlands and the methodology used to assess both the environmental baseline conditions and project impacts can be found in Technical Report 7, *Biological Resources - Memoranda for the Record on Floral and Faunal Surveys*. Information pertaining to biotic communities is provided in Section 4.10, *Biotic Communities*. Information pertaining to protected species that may exist in association with wetland areas is provided in Section 4.11, *Endangered and Threatened Species of Flora and Fauna*.

4.12.2 General Approach and Methodology

The objective of the wetlands analysis is to compare the quality and value of wetland resources under baseline conditions with those anticipated under the No Action/No Project Alternative and four build alternatives. Comments on the Notice of Intent (NOI) and Notice of Preparation (NOP) received from the U.S. Fish and Wildlife Service (USFWS), the U.S. Environmental Protection Agency (USEPA), the USACOE, the California Coastal Commission (CCC), and the California Department of Fish and Game (CDFG) unanimously requested that the Federal Aviation Administration (FAA) undertake an evaluation of the potential impacts on wetlands within the study area. For the purposes of this analysis, the study area is the area within the Master Plan boundaries, including the Los Angeles/El Segundo Dunes.

Wetlands are afforded a high level of regulatory protection due to their role in providing important hydrologic functions such as flood storage, water quality enhancement, and groundwater recharge. Wetlands also provide important biological functions, including breeding, foraging, and resting for fish and wildlife species. Wetlands subject to jurisdiction by the USACOE are defined by three parameters: wetland vegetation, wetland soils, and hydrology. Section 404 of the Clean Water Act authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits for the discharge of dredged or fill materials into the "waters of the United States," which include wetlands. The USACOE⁶⁰⁰ and the USEPA⁶⁰¹ jointly define wetlands as:

"Those 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. Wetlands generally include swamps, marshes, bogs, and similar areas."

The USACOE exerts jurisdiction over a variety of special aquatic habitats, including vernal pools. According to the Los Angeles District of the USACOE, an area shall be considered a vernal pool if it meets the following definition:

Vernal pools are wetlands that seasonally pond in small depressions as a result of a shallow, relatively impermeable layer (e.g., clay or other impervious soil or rock layer) that restricts downward percolation of water. The dominant water source for vernal pools is precipitation, with pools typically filling after fall and winter rains and evaporation during spring and summer. These seasonal ponds are fragile, easily disturbed ecosystems that provide habitat for indigenous, specialized assemblages of flora and fauna, including several species which are either proposed or already federally-listed as threatened or endangered.⁶⁰²

⁶⁰⁰ 33 CFR Part 323.

⁶⁰¹ 40 CFR Part 230.

⁶⁰² USACOE, South Pacific Region, Los Angeles District.

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In accordance with FAA guidelines for conducting environmental impact analysis,⁶⁰³ this analysis addresses considerations specified in Executive Order 11990, Protection of Wetlands. The primary factor considered in this analysis is the overall effect of the proposed action on the survival and quality of the wetlands. In addition, the following factors were also analyzed: aeronautical safety, transportation objectives, economics, practicality of any alternatives and inclusion of all practicable measures to avoid or minimize harm, and compliance with the Fish and Wildlife Coordination Act. The FAA provides specific guidance related to protection of wetlands pursuant to FAA Order 5050.4A, *Airport Environmental Handbook*, which states:

Federal agencies shall ... avoid undertaking or providing assistance for new construction located in wetlands unless the head of the agency finds: a) that there are no practicable alternatives to such construction, and b) that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.⁶⁰⁴

The term 'practicable' means feasible. Whether another alternative is practicable depends on its feasibility in terms of safety, meeting transportation objectives, design, engineering, environment, economics, and any other applicable factors.⁶⁰⁵

Executive Order 11990 requires federal agencies to ensure that their actions minimize the destruction, loss, or degradation of wetlands. Wetlands and other "waters of the United States" (which include wetlands and other special aquatic habitats) are protected pursuant to Section 404 of the Clean Water Act, and are subject to the jurisdiction of the USACOE.

Wetlands within the coastal zone are protected by the Coastal Zone Management Act and the California Coastal Act. (The coastal zone is addressed in Section 4.14, *Coastal Zone Management and Coastal Barriers*.) The CDFG regulates alterations to the flow, bed, channel, or bank of rivers, streams, and lakes. The California Environmental Quality Act (CEQA) and the *CEQA Guidelines* include a more specific description of types of impacts to be considered.

The characterization of wetland resources within the study area was based on a review of historic topographic maps, historic aerial photographs, flood hazard maps, published soil surveys, and the National Wetlands Inventory (NWI). The results of the review of historic aerial photographs and interviews were documented in a letter report and transmittal to the USACOE.⁶⁰⁶ The USACOE concurred with the findings of the letter report.

As indicated in historic aerial photographs^{607, 608} and topographic maps,^{609, 610, 611, 612} the west end of the AOA within the Master Plan boundaries supported a complex of vernal pools and native grasslands until the 1930s (**Figure F4.12-1**, Vernal Pools Historically Present in the Vicinity of LAX (1918), **Figure F4.12-2**, Vernal Pools Historically Present in the Vicinity of LAX (1920), **Figure F4.12-3**, Vernal Pools Historically Present in the Vicinity of LAX (1934), and **Figure F4.12-4**, Vernal Pools Historically Present in the Vicinity of LAX (1944)). Historically, this vernal pool complex may have included as many as 124 acres. A review of historical photographs revealed that construction activities undertaken by Caltrans, private developers, and the City of Los Angeles have affected the entire western portion of the airfield (**Figure F4.12-5**, Historically Disturbed Areas). Construction activities that were evident in the photographs include staging, borrow and fill activities, discing, road construction, runway extension, and expansion of terminal facilities. These activities resulted in substantial alteration to the natural vegetation,

⁶⁰³ Federal Aviation Administration, Order 1050.1 D, [Environmental Impact: Policies and Procedures](#).

⁶⁰⁴ FAA Order 5050.4A, [Airport Environmental Handbook](#), Chapter 5, Paragraph 47e (11) (b).

⁶⁰⁵ FAA Order 5050.4A, [Airport Environmental Handbook](#), Chapter 5, paragraph 47e (11) (e).

⁶⁰⁶ Sapphos Environmental, Inc., [Letter to USACOE \(1067-006.102\)](#), 1997.

⁶⁰⁷ Spence Photo Collection, [Historic Aerial Photo of Los Angeles International Airport Site](#), dated November 12, 1949.

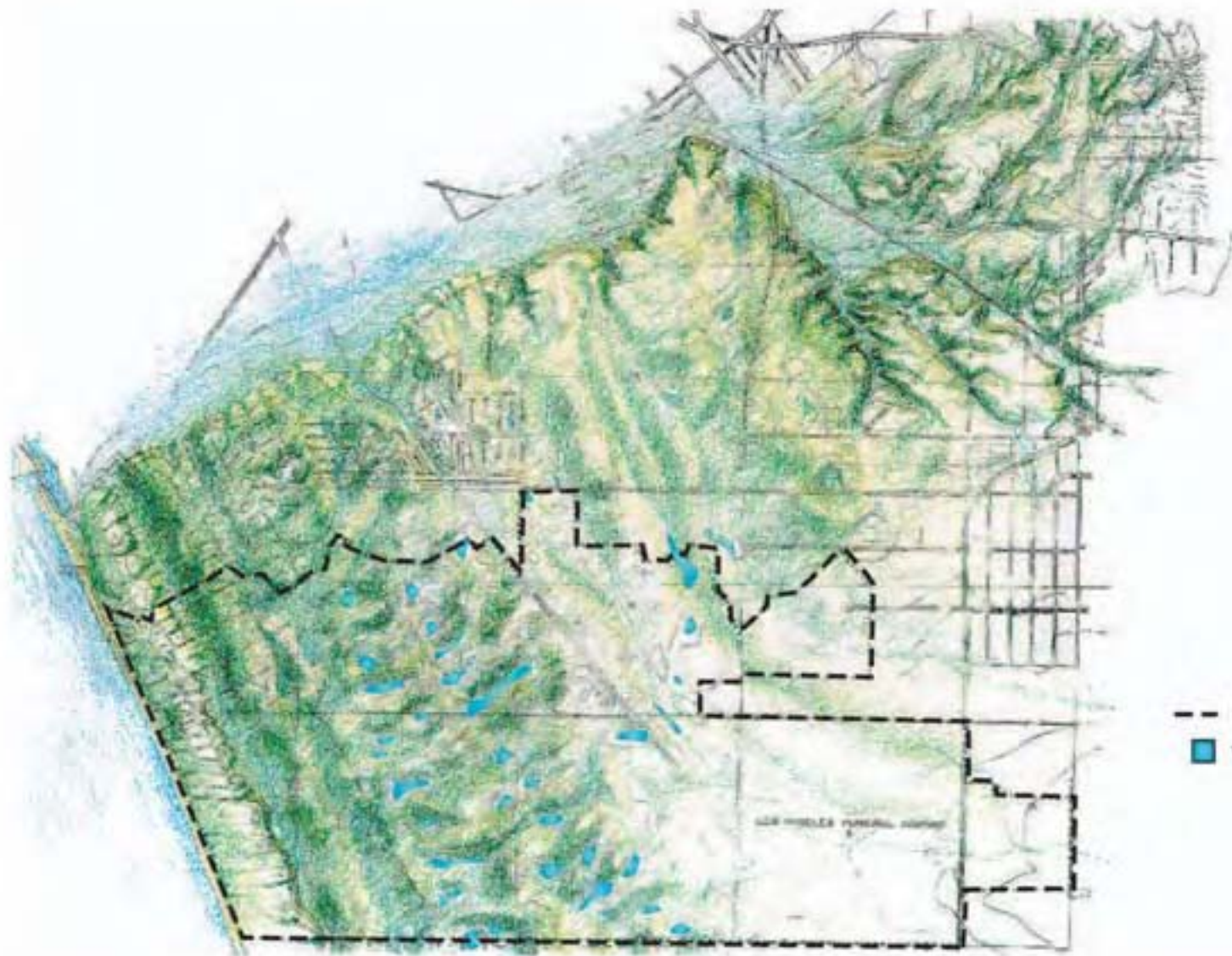
⁶⁰⁸ Spence Photo Collection, [Historic Aerial Photo of Los Angeles International Airport Site](#), dated February 7, 1948.

⁶⁰⁹ USACOE, War Department, [Declassified Topographic Map of the Redondo, California Quadrangle: 15 minute series map, scale 1:62,500, 1944](#).

⁶¹⁰ U.S. Geological Survey, [Topographic Map of the Venice, California Quadrangle: 7.5 minute map, scale 1:24,000, 1988](#).

⁶¹¹ U.S. Geological Survey, [Historic Topographic Map of the Venice, California Quadrangle: 7.5 minute map, scale 1:24,000, 1964 \(photo-revised 1981\)](#).

⁶¹² U.S. Geological Survey, [Topographic Map of the Venice, California Quadrangle: 7.5 minute map, scale 1:24,000, 1934](#).



- Project Boundary
- Vernal Pool

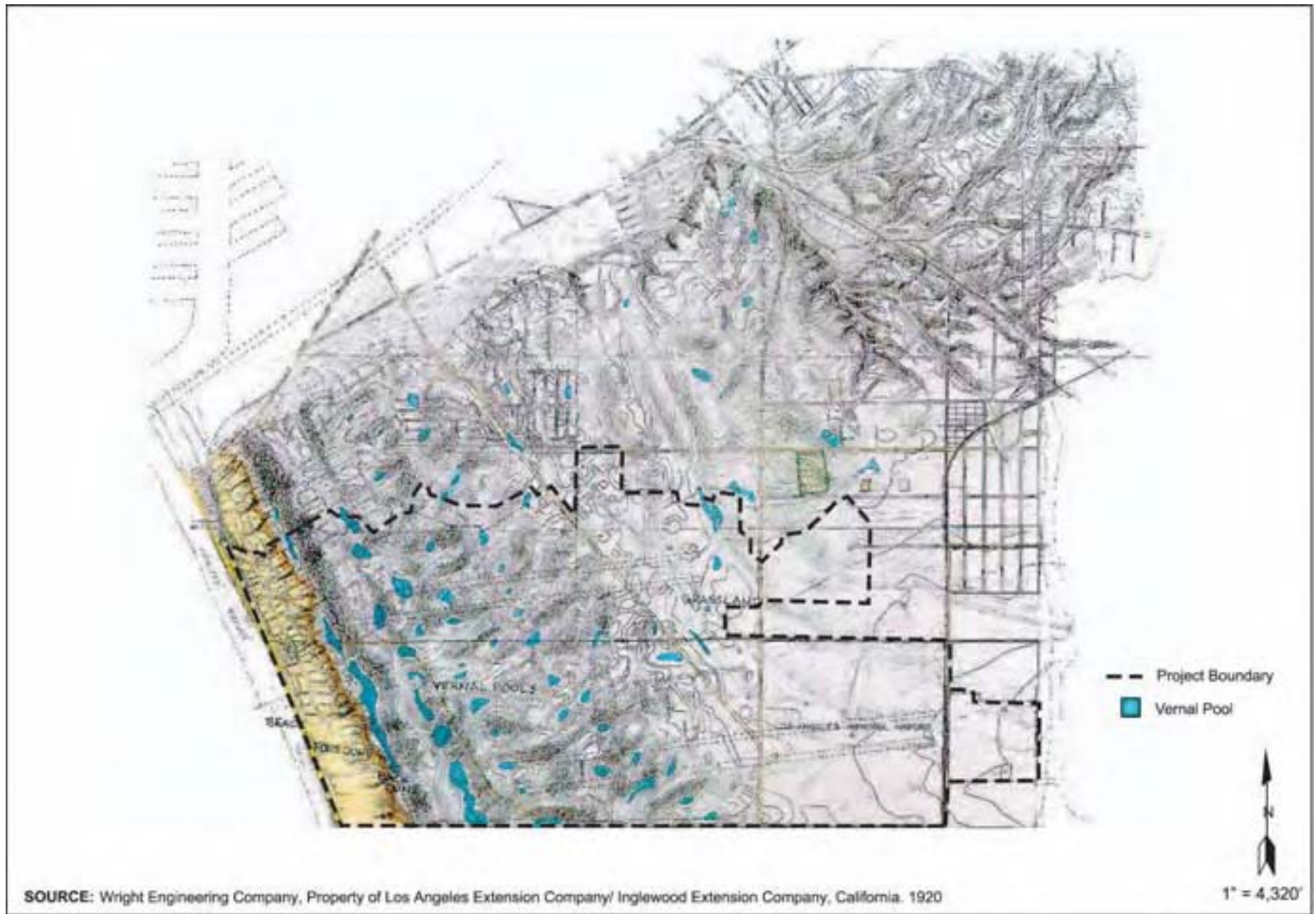
1" = 4,320'

SOURCE: Wright Engineering Company, Property of Los Angeles Extension Company/ Inglewood Extension Company, California. 1918

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**Vernal Pools Historically Present
in the Vicinity of LAX (1918)**

Figure
F4.12-1



LAX Master Plan Final EIS/EIR

**Vernal Pools Historically Present
in the Vicinity of LAX (1920)**

**Figure
F4.12-2**



SOURCE: USGS Topographic Map of Venice, California Quadrangle: 7.5 Minute Series Map, 1934

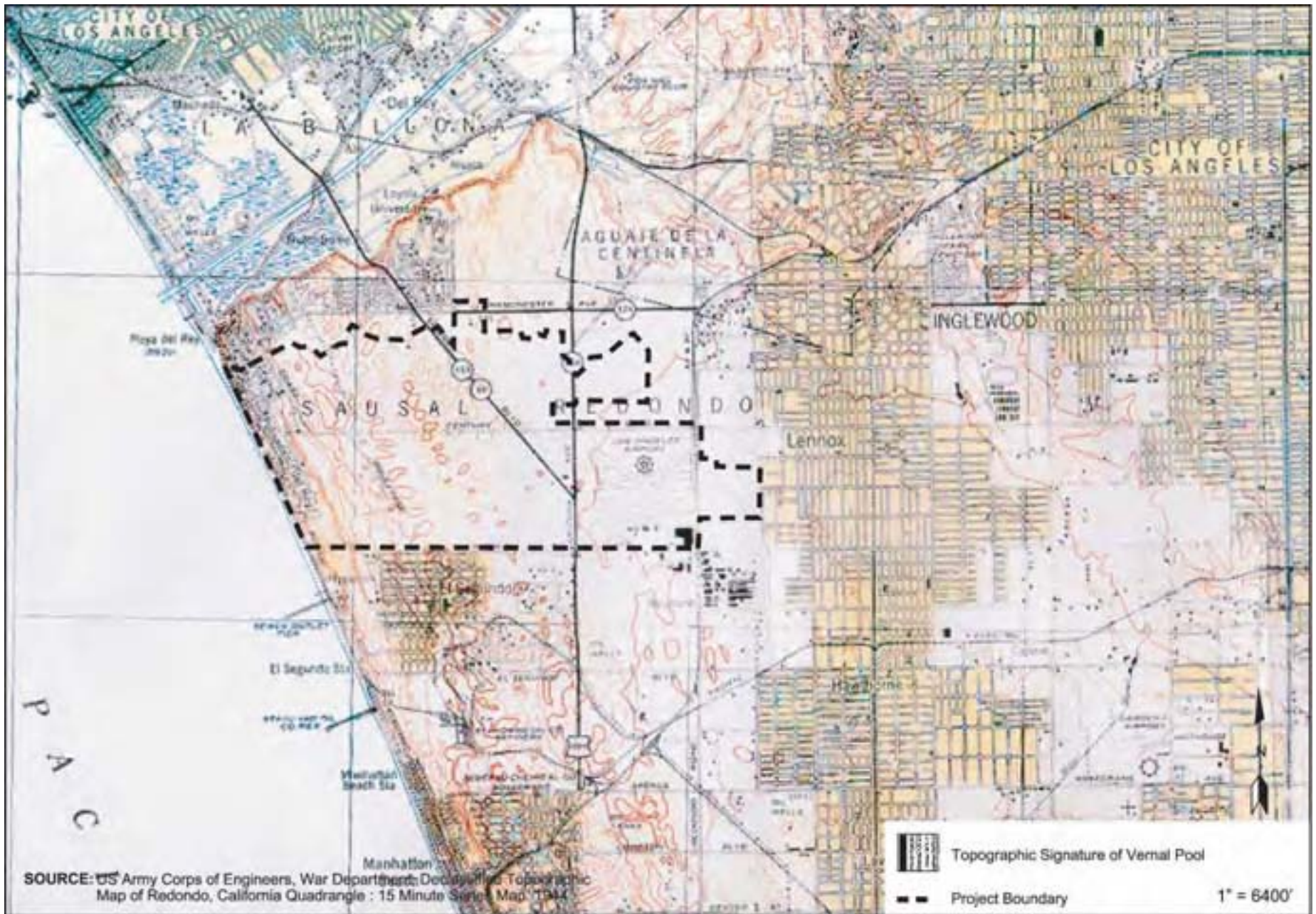
Topographic Signature of Vernal Pool


 1" = 3,381'

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Vernal Pools Historically Present in the Vicinity of LAX (1934)

Figure F4.12-3





LAX Master Plan Final EIS/EIR

**Vernal Pools Historically Present
in the Vicinity of LAX (1944)**

**Figure
F4.12-4**



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-  Areas Surveyed for Potential Vernal Pools
-  Areas of Construction, Staging, Borrow Sites, and Earth Movement



soils, and hydrology that precludes the presence of wetlands parameters. However, the USACOE directed the FAA and LAWA to consider the presence or absence of wetlands in light of the atypical situation caused by human activities. Under the atypical situation, ephemeral wetted areas that are seasonally inundated or saturated for more than 12.5 percent of the growing season in a year of at least average rainfall meet the criteria for "waters of the United States."

As recommended by the USACOE's 1987 *Field Guide for Wetland Delineation*,⁶¹³ the U.S. Geological Survey (USGS) 7.5 minute topographic series, Venice Quadrangle, was reviewed for the presence of wet areas (swamps and marshes) and other drainage features (appearing as blue lines on the maps) that might indicate the potential presence of wetlands. Two drainage features were found to appear on the Venice topographic quadrangle: the Argo Ditch and the Century Boulevard Storm Drain, as shown in **Figure F4.12-6**, "Blue-Line" Drainage Features. A review of historical topographic maps and aerial photographs⁶¹⁴ indicates that the Argo Ditch is a man-made flood control structure that was constructed circa 1949. The Argo Ditch does not connect to any river, stream, or lake, but has been determined to flow into the Pacific Ocean through connections with the City of Los Angeles' storm drain system.⁶¹⁵

A jurisdictional delineation of the Argo Ditch was completed in support of emergency channel maintenance activities in October 1997. The USACOE 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. The USACOE authorized emergency operations and maintenance activities pursuant to Nationwide Permit No. 31.⁶¹⁶ The permanent removal of isolated wetland and riparian vegetation was mitigated through an off-site mitigation program. The USACOE determined that, upon completion of emergency operations and maintenance activities, the Argo Ditch would no longer be subject to its jurisdiction pursuant to Section 404 of the Clean Water Act. This activity was authorized, and clearance was completed as an independent activity; it is not subject to further evaluation or considerations under this Master Plan.

Pursuant to Section 1600 of the California Fish and Game Code, the CDFG requires a Streambed Alteration Agreement for projects that will divert or obstruct the natural flow of water, change the bed, channel, or bank of any stream, or use any material from a streambed. The Streambed Alteration Agreement is a contract between the applicant and the CDFG stating what can be done in the riparian zone and stream course. As a man-made structure, the Argo Ditch was considered by LAWA not to be subject to the jurisdiction of the CDFG. However, the CDFG notified LAWA of their intent to exert jurisdiction over the Argo Ditch during the public notice period on the Pre-Discharge Notification for Use of Nationwide Permit No. 31. Subsequently, LAWA and the CDFG entered into a Negotiated Agreement regarding conditions to be imposed on emergency channel maintenance activities.⁶¹⁷ The Negotiated Agreement stipulated an off-site revegetation program as mitigation for the permanent removal of riparian and wetland vegetation from the Argo Ditch.

Field examination of the second "blue-line" drainage depicted on the topographic map revealed the Century Boulevard Storm Drain to be a man-made urban flood control structure excavated from a terrestrial upland area. The Century Boulevard Storm Drain parallels Century Boulevard and Aviation Boulevard, and consists primarily of a concrete box structure. The storm drain does not contain soils or vegetation, and therefore, does not constitute a wetland or "waters of the United States."

As recommended by the USACOE Field Guide for Wetland Delineation,⁶¹⁸ the NWI Map was reviewed for potential wetlands within the study area. The NWI identifies five potential wetlands within the Master Plan boundaries, as shown in **Figure F4.12-7**, National Wetlands Inventory Map. The five areas are as follows:

⁶¹³ Wetland Training Institute, Inc., *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual (WTI 91-2)*, 133 pp., 1991.

⁶¹⁴ Sapphos Environmental, Inc., *Memorandum for the Record (JN 1067-004.M18), Recommendations for Addressing Regulatory Compliance Issues Related to Areas Subject to the Jurisdiction of the U.S. Army Corps of Engineers and the California Department of Fish and Game at Los Angeles International Airport*, City of Los Angeles, California, 1997.

⁶¹⁵ Bapna, Victor, County of Los Angeles Department of Public Works, *Personal Communication*, August 2000.

⁶¹⁶ USACOE, *Letter to Mr. John Driscoll, Executive Director, Los Angeles World Airports*, 1998.

⁶¹⁷ CDFG, 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 III, California Department of Fish and Game, 1998.

⁶¹⁸ Wetland Training Institute, Inc., *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual (WTI 91-2)*, 1991.

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- ◆ The Argo Ditch, located north of Runway 24R, is identified as a palustrine⁶¹⁹ emergent wetland with a saturated/semi-permanent seasonal water regime.
- ◆ A small area west of Runway 24R is identified as a palustrine open water with an intermittently flooded/temporary water regime. It is an ephemerally wetted area that consists of surface runoff that accumulates west of the maintenance road due to inadequate drainage.
- ◆ A small area east of Pershing Drive is identified as palustrine emergent wetland with a saturated/semi-permanent/seasonal water regime. It appears to be an open stormwater channel that may have been converted to a subsurface feature during the realignment of Pershing Drive.
- ◆ A small area immediately northeast of the intersection of Pershing Drive and Imperial Highway is identified. It served as an on-site detention basin for the Argo Ditch prior to realignment of the Ditch to discharge into the Westchester Storm Drain Channel.
- ◆ A small area located within the Westchester Golf Course is identified.

Wetlands designated by the NWI are not necessarily subject to the jurisdiction of the USACOE;⁶²⁰ the NWI is more inclusive than the Federal Clean Water Act in that it requires a positive indicator of only one of the three parameters (wetlands vegetation, wetland soils, or hydrology). The five areas identified in the NWI have been modified as a result of various airport capital improvement projects, construction of the Westchester Golf Course, and ongoing operations and maintenance activities.

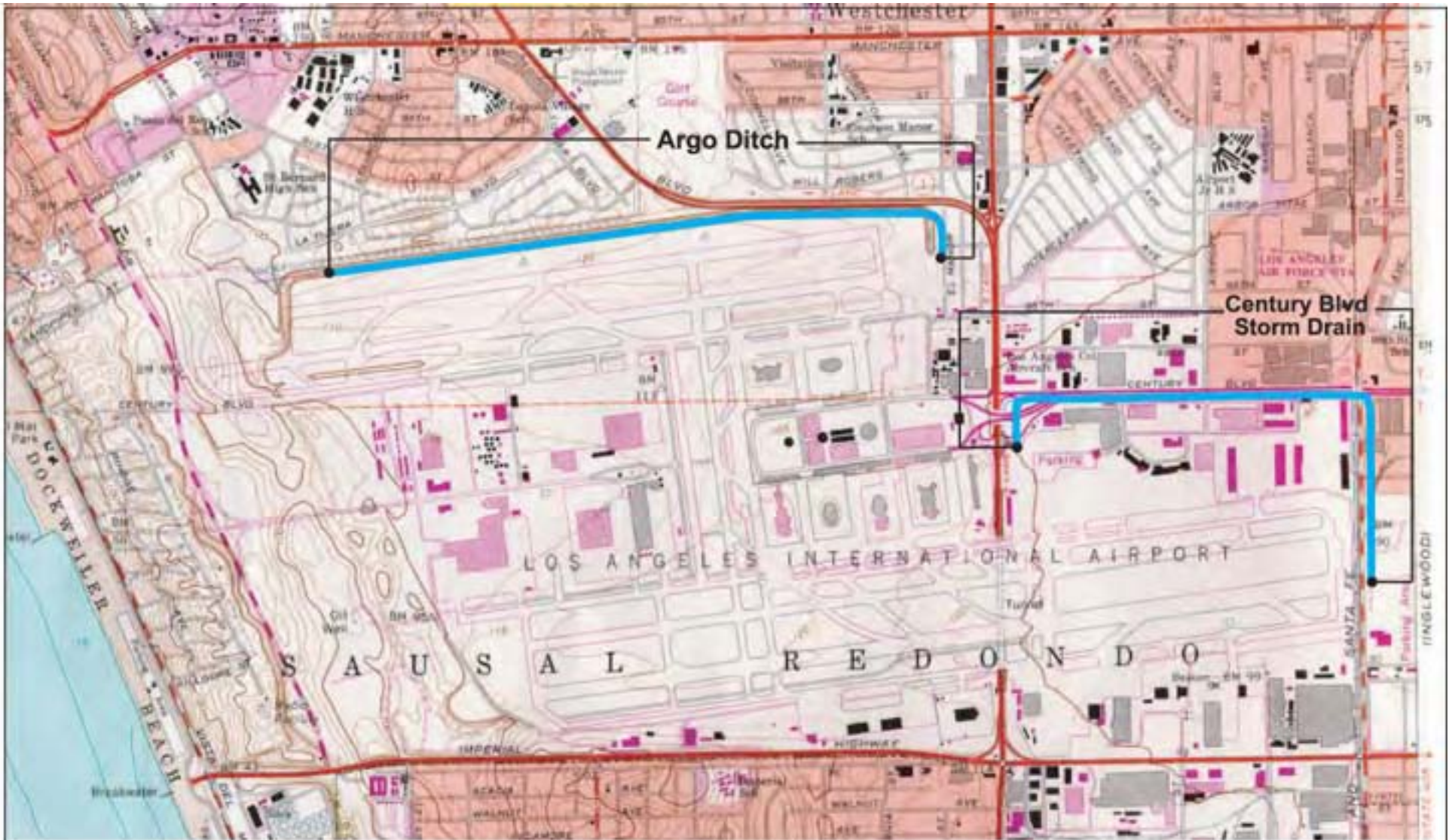
The results of the review of historical topographic quadrangles, historical aerial photographs, and the NWI Map served as the basis for the delineation of areas potentially subject to the jurisdiction of the USACOE and CDFG. Field reconnaissance of the western portion of the AOA was undertaken by Sapphos Environmental, Inc. in fall 1997 to document the level of disturbance in the areas that historically contained vernal pools. Forty-seven sampling areas were identified as sharing some evidence of hydrologic activity such as polygonal cracking, soil crusts, or topographic depressions. Sapphos Environmental, Inc. monitored these areas throughout the rainy season of 1997/1998, a season of above-average rainfall. During the course of winter monitoring, five additional areas were observed to pond water, and were thus included in the evaluation for the potential presence of wetlands. A total of 52 sampling areas were evaluated for their potential to meet the USACOE and EPA delineation of wetlands (**Figure F4.12-8**, Monitoring Sites: Ephemerally Wetted Areas). Given the atypical conditions resulting from human activities, those areas that retained water for 12.5 percent of the growing season (18 days) were considered to have extant wetland hydrology. Monitoring continued during the 1998/1999 rainy season and these monitoring sites were revisited during the 1999/2000 winter storm season, a season of below-average rainfall. There was no change in the condition of monitored sites from the 1998/1999 and 1999/2000 rainy seasons. The field delineation was undertaken in accordance with the USACOE 1987 Field Guide for Wetland Delineation.⁶²¹ A detailed description of criteria used to delineate wetlands can be found in Appendix J2, *Jurisdictional Delineation*. The presence or absence of wetland areas was determined through a field evaluation of all potential wetland resources. This analysis was further augmented by directed surveys for vernal pool-associated species of flora and fauna, described in Section 4.11, *Endangered and Threatened Species of Flora and Fauna*.

The potential for implementation of the LAX Master Plan to result in impacts on wetlands was evaluated by comparing the areas proposed for development under the No Action/No Project Alternative and the four build alternatives with the locations of areas subject to the jurisdiction of the USACOE. This evaluation was undertaken with 50-scale (one inch equals 50 feet) orthographic aerial photographs, with one-foot contours. The size of the areas that would be converted as a result of proposed development were then evaluated quantitatively.

⁶¹⁹ Palustrine is a geological term used to describe a marshy or swampy environment.

⁶²⁰ Cowardin, L. M., et al., *Classification of Wetlands and Deepwater Habitats of the United States*, FWS/OBS-79/31, U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C., 1979.

⁶²¹ Wetland Training Institute, Inc., *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual*, (WTI 91-2), 133 pp., 1991.

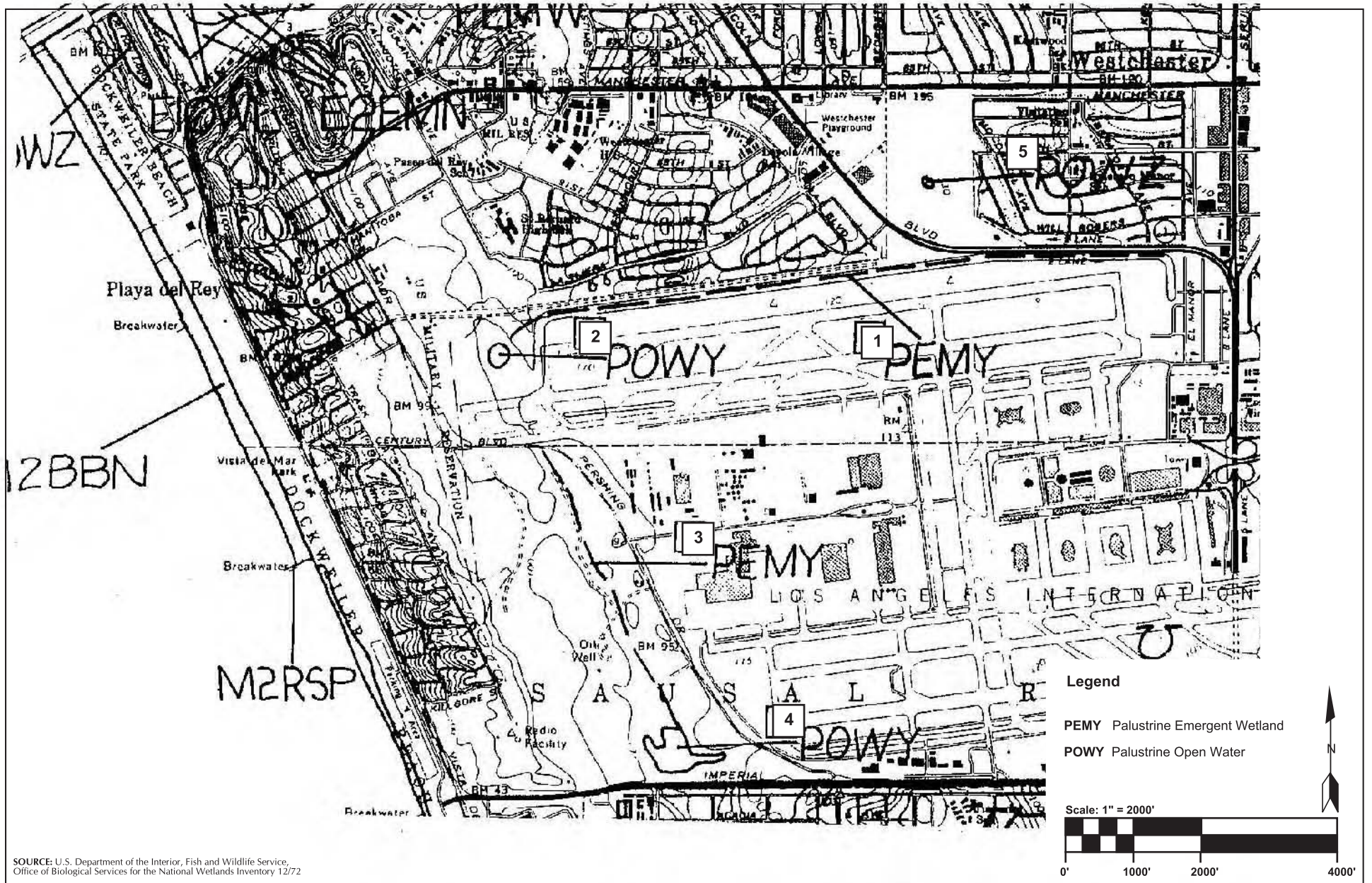


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"Blue-Line" Drainage Features

Figure F4.12-6

Figure F4.12-6



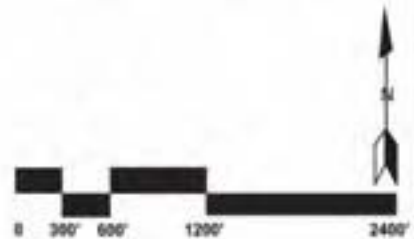
SOURCE: U.S. Department of the Interior, Fish and Wildlife Service, Office of Biological Services for the National Wetlands Inventory 12/72



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EW Ephemeraally Wetted Areas

SOURCE: Commercial Aerial Photo, Inc. 10571 Calle Las Bolas 103, Los Alamitos, CA 90720



4.12.3 Affected Environment/Environmental Baseline

Areas Subject To USACOE Jurisdiction

As a result of monitoring conducted during the winter of 1997/1998, a year of above-average rainfall, it was determined that there are a total of 1.3 acres within the AOA that meet the USACOE criteria for wetland hydrology (**Figure F4.12-9**, Areas Subject to USACOE Jurisdiction). Of the 52 sites monitored through the rainy season, 17 sites ponded water for at least seven days (**Table F4.12-1**, Monitoring Results for Ephemeraally Wetted Areas). Three sites, EW003, EW004, and EW005, were part of a larger site that included EW001 and EW002. Sites EW003, EW004, and EW005 dried rapidly following a storm event, while Sites EW001 and EW002 retained water for at least seven days. None of the sampled areas showed evidence of hydric soils, nor were they dominated by hydrophytic vegetation. Embedded cysts of the Riverside fairy shrimp (*Streptocephalus woottoni*) were recovered from soil samples from nine of the monitored sites: EW001, EW002, EW006, EW009, EW012, EW013, EW014, EW015, and EW016. With the exception of EW006, these sites and three additional sites (EW008, EW010, and EW011) ponded water for 18 days following a storm event in 1997/1998, thus meeting the USACOE criteria for wetland hydrology. As indicated previously, the USACOE has determined to treat the AOA as an atypical situation due to the effects of recent (1930-2000) human activities. Under the atypical situation, it has been indicated that the presence of wetland hydrology is sufficient to allow the USACOE to exert jurisdiction pursuant to Section 404 of the Clean Water Act. The USACOE issued a letter of jurisdictional determination (provided in Appendix S-A, *Agency Consultation Letters*) on October 17, 2001 in concurrence with the findings of the *Jurisdictional Delineation* (Appendix J2) that the proposed project does discharge dredged or fill material into 1.3 acres of vernal pool wetlands, requiring a permit under Section 404 of the federal Clean Water Act.⁶²²

The U.S. Fish and Wildlife Service has issued a Biological Opinion for Alternative D pursuant to Section 7 of the Federal Endangered Species Act for potential impacts to 1.3 acres of jurisdictional wetlands containing embedded cysts of the Riverside fairy shrimp. As a result of extensive coordination and consultation undertaken with the USFWS, FAA and LAWA have incorporated 12 conservation measures specified in the Biological Opinion into Section 4.11, *Endangered and Threatened Species of Flora and Fauna*. Specifically, there are three conservation measures to avoid indirect impacts to 1.26 acres of jurisdictional wetlands under Alternative D. Additionally, the FAA and the City of Los Angeles have identified a mitigation program (MM-ET-1) for unavoidable impacts to 0.04 (1,853 square feet) acre of jurisdictional wetlands containing embedded cysts of the Riverside fairy shrimp. Implementation of MM-ET-1 is described in Section 4.11.8 of this Final EIS/EIR.

⁶²² Castanon, David, Chief, North Coast Section Regulatory Branch USACOE, [Personal Communication](#), October 17, 2001.

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Table F4.12-1

Monitoring Results for Ephemeraally Wetted Areas

Location	Size (square feet)	Ponded Water						Hydric Soils	Hydrophytic Vegetation	Sensitive Vernal Pool- Associated Species
		1997/1998		1998/1999		1999/2000				
		7 Days	18 Days	7 Days	18 Days	7 Days	18 Days			
EW001	123	Y	Y	Y	N	Y	N	N	N	Y
EW002	292	Y	Y	Y	N	Y	N	N	N	Y
EW003	74	N	N	N	N	N	N	N	N	N
EW004	95	N	N	N	N	N	N	N	N	N
EW005	212	N	N	N	N	N	N	N	N	N
EW006	1,438	Y	N	N	N	N	N	N	N	Y
EW007	275	Y	N	N	N	N	N	N	N	N
EW008	5,706	Y	Y	N	N	N	N	N	N	N
EW009	577	Y	Y	N	N	N	N	N	N	Y
EW010	312	Y	Y	N	N	N	N	N	N	N
EW011	809	Y	Y	N	N	N	N	N	N	N
EW012	548	Y	Y	Y	N	Y	N	N	N	Y
EW013	4,808	Y	Y	N	N	N	N	N	N	Y
EW014	39,199	Y	Y	Y	Y	Y	Y	N	N	Y
EW015	2,086	Y	Y	Y	N	Y	N	N	N	Y
EW016	3,936	Y	Y	Y	N	Y	N	N	N	Y
EW017	13,719	Y	N	N	N	N	N	N	N	N
EW018	1,659	Y	N	N	N	N	N	N	N	N
EW019	807	Y	N	N	N	N	N	N	N	N
EW020	1,691	Y	N	N	N	N	N	N	N	N

Source: Sapphos Environmental, Inc., 2000.

Areas Subject To CDFG Jurisdiction

There are no rivers, lakes, or streams potentially subject to the jurisdiction of the CDFG pursuant to Section 1600 of the State Fish and Game Code within the Master Plan boundaries.

There are no wetlands within the Los Angeles/El Segundo Dunes, which is the only portion of the airport within the jurisdiction of the CCC. The 1.3 acres subject to the jurisdiction of the USACOE are located east of Pershing Drive, outside the coastal zone.

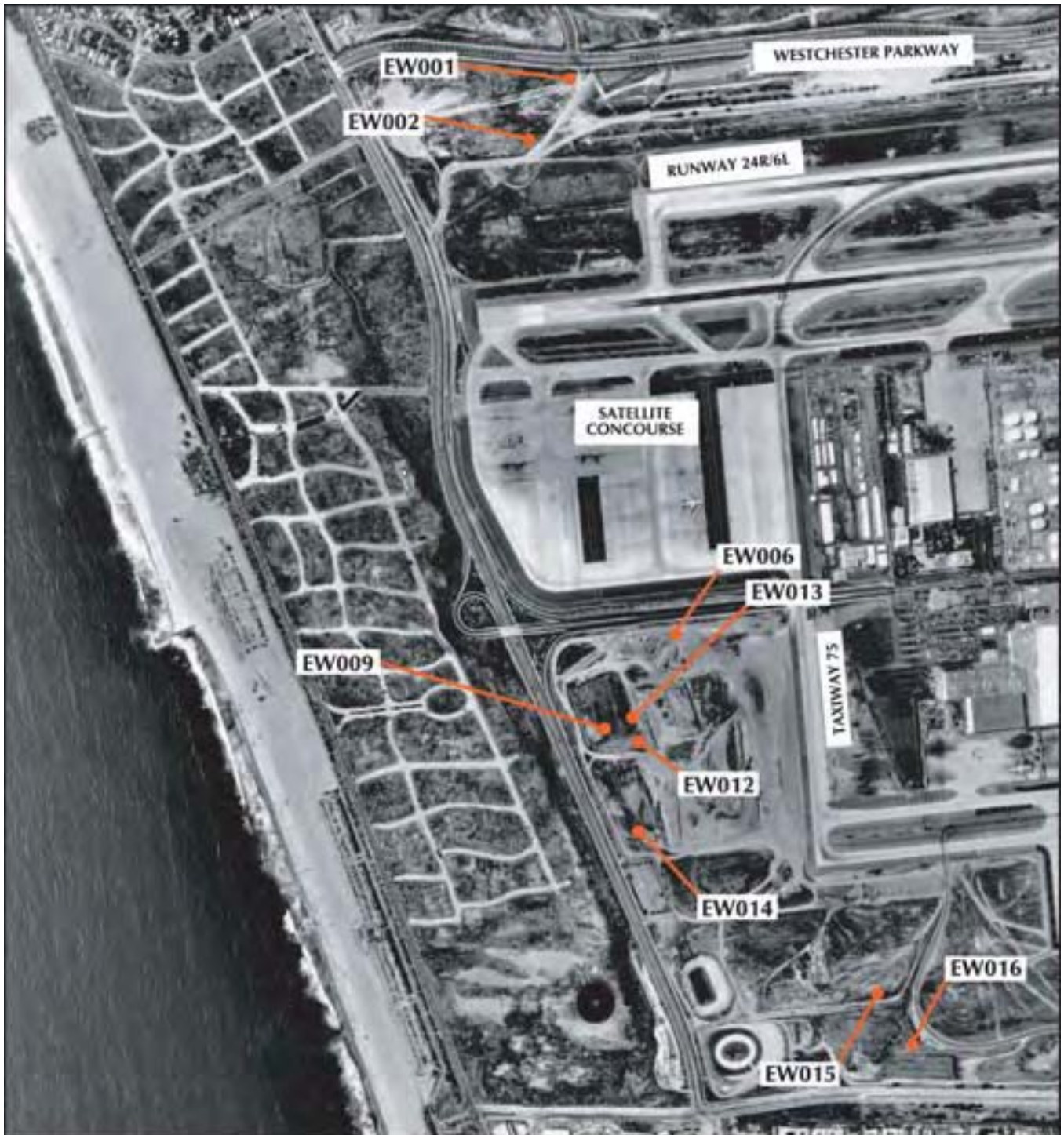
4.12.4 Thresholds of Significance

4.12.4.1 CEQA Thresholds of Significance

A significant wetlands impact would occur in the Master Plan area if direct and indirect changes in the environment, which might be caused by the particular build alternative, potentially could result in one or more of the following future conditions:

- ◆ Alteration of the flow, bed, channel, or bank of rivers, streams, or lakes as defined in Section 1600 of the State Fish and Game Code.
- ◆ A substantial adverse effect on federally-protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruptions, or other means.
- ◆ Impact in excess of 0.1 acre of wetland habitat (including marsh, riparian, or vernal pools) or lakes, rivers, streams, or other special aquatic habitats, as defined in Section 404 of the Clean Water Act.
- ◆ Alteration of an existing wetland habitat.

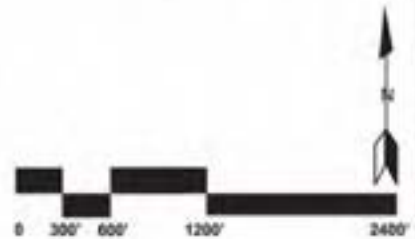
The above thresholds are utilized in criteria established in Section 404 of the Clean Water Act, the NWI, Section 1600 of the State Fish and Game Code, the *Draft L.A. CEQA Thresholds Guide* and the 1998 Revisions to Appendix G of the *State CEQA Guidelines*. These thresholds address the concerns relative to wetlands associated with the Master Plan build alternatives, namely destruction, loss, alteration, or degradation of wetlands. An evaluation of whether or not an impact on wetlands would be significant



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EW Ephemeral Wetland Areas

SOURCE: Continental Aerial Photo, Inc., 10571 Calle Las Gatas Suite 103, Los Alamitos, CA 90720



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**Areas Subject to
USACOE Jurisdiction**

Figure
F4.12-9

must consider both the wetland resource and how it fits into a regional context. The criteria for determining the significance of impacts are based on the importance of the wetland area, the proximity of the area to the project site, the proportion of the area that would be affected, the sensitivity of the area to the type of impact being considered, and the extent and degree of the proposed impact.

4.12.4.2 Federal Standards

Federal standards related to wetlands are incorporated within the CEQA thresholds of significance defined above. Such federal standards include Section 404 of the Clean Water Act, which regulates discharge of dredge or fill material into lakes, rivers, streams, wetlands, and other special aquatic habitats.

4.12.5 Master Plan Commitments

No Master Plan commitments for wetlands are proposed.

4.12.6 Environmental Consequences

This section describes the potential environmental consequences of the No Action/No Project Alternative and the four build alternatives on areas subject to the jurisdiction of the USACOE. Provided below is an overview of the impacts associated with all of the alternatives. Following that, each alternative's potential effects to wetland areas is discussed.

An evaluation of avoidance and minimization of impacts is required under the National Environmental Policy Act. Under the No Action/No Project Alternative, the existing 1.3 acres of jurisdictional wetlands would be retained. However, minimization of impacts or avoidance of jurisdictional wetlands are not practical because the 1.3 acres characterized as jurisdictional wetlands are located within the western AOA, and are therefore subject to routine operations and maintenance activity in compliance with Title 14, CFR Part 139. Title 14, CFR Part 139 mandates that the AOA be maintained in such a condition so as to minimize or eliminate hazards to public safety resulting from wildlife utilization of the AOA. Such routine maintenance activities may include mowing or discing of vegetation to reduce its attractiveness to wildlife and elimination of standing water.

Under Alternatives A, B, and C, minimization of impacts or avoidance is not practical because in order to improve and modernize LAX facilities to serve the purpose and objectives of the Master Plan, relocation and/or expansion of the current physical facilities is warranted. The 1.3 acres subject to the jurisdiction of the USACOE lie within the western end of the AOA, and this is the only open space available for the construction of new terminals and support facilities, as LAX is surrounded by development.

Under Alternative D, minimization of impacts or avoidance is not practical for 0.04 acre (1,853 square feet) of jurisdictional wetlands located within the western end of the AOA. Indirect impacts to the remaining 1.26 acres of jurisdictional wetlands would be avoided through implementation of construction avoidance measures, in conformance with the Biological Opinion issued by the USFWS, including Best Management Practices (BMPs) required pursuant to the Standard Urban Stormwater Mitigation Plan and the LAX Stormwater Pollution Prevention Plan. Other than Alternative D, for which 1.26 acres of jurisdictional wetlands would be retained, there are no feasible alternatives that would result in no impacts to all jurisdictional wetland sites.

The environmental consequences to wetlands are largely related to loss of habitat values and functions. The 1.3 acres subject to the jurisdiction of the USACOE are located within the AOA, therefore, they are subject to routine operations and maintenance activities that reduce habitat values and functions normally associated with wetlands. In addition, impacts to these jurisdictional wetlands under the four build alternatives would result from the conversion of jurisdictional areas to development.

Section 404 of the Clean Water Act authorizes the Secretary of the Army, acting through the Chief of Engineers, to issue permits, after notice and opportunity for public hearing, for the discharge of dredged and fill materials into the waters of the United States at specified disposal sites.⁶²³ The decision to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the

⁶²³ 33 CFR Part 323.

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proposed activity and its intended use on the public interest.⁶²⁴ The USACOE exerts discretionary jurisdiction over projects with between 0.3 and 10 acres of impact. Projects with impacts of greater than 10 acres within the USACOE's jurisdiction are subject to individual permits.

As described in the Analytical Framework discussion in the introduction to Chapter 4, the basis for determining impacts under CEQA is different from that of NEPA. Under CEQA, the impacts of a proposed project and alternatives are measured against the "environmental baseline," which is normally the physical conditions that existed at the time the Notice of Preparation was published (i.e., June 1997, or 1996 when a full year of data is appropriate, for the LAX Master Plan Draft EIS/EIR). As such, the CEQA analysis in this Final EIS/EIR uses the environmental baseline, or in some cases an "adjusted environmental baseline," as the basis by which to measure and evaluate the impacts of each alternative. Under NEPA, the impacts of each action alternative (i.e., build alternative) are measured against the conditions that would otherwise occur in the future if no action were to occur (i.e., the "No Action" alternative). As such, the NEPA analysis in this Final EIS/EIR uses the No Action/No Project Alternative as the basis by which to measure and evaluate the impacts of each build alternative (i.e., Alternatives A, B, C, and D) in the future (i.e., at buildout in 2015 or, for construction-related impacts, selected future interim year). Based on this fundamental difference in the approach to evaluating impacts, the nature and significance of impacts determined under CEQA are not necessarily representative of, or applicable to, impacts determined under NEPA. The following presentation of environmental consequences should, therefore, be reviewed and considered accordingly.

4.12.6.1 No Action/No Project Alternative

Under the No Action/No Project Alternative, the existing 1.3 acres subject to the jurisdiction of the USACOE within the Master Plan boundaries would be retained. However, minimization of impacts or avoidance of jurisdictional wetlands are not practical because the 1.3 acres of jurisdictional wetlands are located within the western AOA, and are therefore subject to routine operations and maintenance activity in compliance with Title 14, CFR Part 139. Title 14, CFR Part 139 mandates that the AOA be maintained in such a condition so as to minimize or eliminate hazards to public safety resulting from wildlife utilization of the AOA. Such routine maintenance activities may include mowing or discing of vegetation to reduce its attractiveness to wildlife and elimination of standing water. Long-term operations and maintenance of the western AOA, which includes the 1.3 acres of jurisdictional wetlands, would result in the loss of habitat values and functions normally associated with wetlands.

4.12.6.2 Alternative A - Added Runway North

Under Alternative A, the 1.3 acres subject to the jurisdiction of the USACOE would be permanently converted as a result of construction staging, airfield operations and maintenance, and/or airfield improvements. EW001 and EW002 would be affected by construction staging activities in support of improvements to the two existing north runways, 24R and 24L. In addition, it is likely that the construction of the proposed ring road would also affect EW001 and EW002. EW006, EW009, EW012, EW013, EW014, EW015, and EW016 would be converted during development of the West Terminal Area (WTA), short-term parking, and access/roadway improvements. Alternative A would permanently convert the 1.3 acres to development, which would be a significant impact. Impacts to the 1.3 acres of jurisdictional wetlands are unavoidable under Alternative A and there are no feasible alternatives that would result in no impacts to all jurisdictional wetland sites.

4.12.6.3 Alternative B - Added Runway South

Under Alternative B, the 1.3 acres subject to the jurisdiction of the USACOE would be permanently converted as a result of construction staging, airfield operations and maintenance, and/or airfield improvements. EW001 and EW002 would be affected by construction staging activities in support of relocation of existing runways 24L and 24R. In addition, construction of the proposed ring road is expected to affect EW001 and EW002. EW006, EW009, EW012, EW013, EW014, EW015, and EW016 would be converted during development of the WTA, short-term parking, and access/roadway improvements. Alternative B would permanently convert the 1.3 acres to development, which would be a

⁶²⁴ 33 CFR Part 320.

significant impact. Impacts to the 1.3 acres of jurisdictional wetlands are unavoidable under Alternative B and there are no feasible alternatives that would result in no impacts to all jurisdictional wetland sites.

4.12.6.4 Alternative C - No Additional Runway

Under Alternative C, the 1.3 acres subject to the jurisdiction of the USACOE would be permanently converted as a result of construction staging, airfield operations and maintenance, and/or airfield improvements. EW001 and EW002 would be affected by construction staging activities in support of relocation of existing runways 24L and 24R. In addition, similar to Alternatives A and B, construction of the proposed ring road is expected to affect EW001 and EW002. EW006, EW009, EW012, EW013, EW014, EW015, and EW016 would be converted by development of the WTA, proposed close-in public parking, and access/roadway improvements. These improvements would expand with the addition of rental car facilities, employee parking, and light rail transportation systems. Alternative C would permanently convert the 1.3 acres to development, which would be a significant impact. Impacts to the 1.3 acres of jurisdictional wetlands are unavoidable under Alternative C and there are no feasible alternatives that would result in no impacts to all jurisdictional wetland sites.

4.12.6.5 Alternative D - Enhanced Safety and Security Plan

Under Alternative D, 0.04 acre (1,853 square feet) subject to the jurisdiction of the USACOE (see **Figure F4.12-9**) would be permanently converted as a result of construction staging, airfield operations and maintenance activities, and/or airfield improvements. EW001 and EW002 would be directly affected by construction staging activities in support of development of the proposed airside service road and EW06 would be directly affected by the development of the proposed employee parking garage. This conversion would result in significant impacts to jurisdictional wetlands that exceed thresholds established by the USACOE pursuant to Section 404 of the Clean Water Act. In addition, EW009, EW012, EW013, EW014, EW015, and EW016, comprising the remaining 1.26 acres of jurisdictional wetlands, have the potential to be indirectly affected as a result of construction staging, airfield operations and maintenance, and/or airfield improvements within or adjacent to these jurisdictional areas. Specifically, EW009, EW012, EW013, and EW014 would potentially be affected by construction staging and development of the proposed employee parking garage. EW015 and EW016 would potentially be affected by construction staging in support of development of the Taxiway/Aircraft Apron and the proposed employee parking garage. The potential indirect effects to EW009, EW012, EW013, EW014, EW015, and EW016 would be avoided through implementation of construction avoidance measures, including BMPs required pursuant to the Standard Urban Stormwater Mitigation Plan and the LAX Stormwater Pollution Prevention Plan, and establishment of a buffer area around the six jurisdictional wetlands retained on the LAX airfield, as specified in the Biological Opinion. Indirect impacts to 1.26 acres of jurisdictional wetlands are avoidable under Alternative D, however, there are no feasible alternatives that would result in no impact to all jurisdictional wetland sites.

Long-term operations and maintenance of the western AOA under Alternative D would include the 1.26 acres of jurisdictional wetlands retained on the AOA for which construction avoidance measures would be implemented. Operations and maintenance activities would maintain the areas in their existing condition. FAA and LAWA will undertake a separate Section 7 consultation with the USFWS to address ongoing operations and maintenance activities within the six areas retained on the AOA (EW009, EW012, EW013, EW014, EW015, and EW016).

4.12.7 Cumulative Impacts

The cumulative impacts to wetlands under the No Action/No Project Alternative and Alternatives A, B, C, or D, in combination with other past, present, and probable future projects, are discussed below. As discussed in subsection 4.12.3, *Affected Environment/Environmental Baseline*, there are currently 1.3 acres subject to the jurisdiction of the USACOE present in the AOA. These 1.3 acres of jurisdictional wetlands are currently subject to routine operations and maintenance activities that reduce habitat values and functions normally associated with wetlands.

4.12.7.1 No Action/No Project Alternative

Under the No Action/No Project Alternative, the existing 1.3 acres subject to the jurisdiction of the USACOE would remain. As in the baseline conditions, operations and maintenance activities would minimize wetland functions and values associated with these areas. With respect to other local

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development projects, the Playa Vista project has proposed to develop 111 acres of disturbed/developed area that was previously used in conjunction with Hughes Aircraft operations and will no longer involve impacts to the Ballona Wetlands. The potential for impacts to wetlands from other projects and ongoing growth in the local area is considered to be very limited, based on the urban nature of the area and the likelihood that such projects would occur primarily as infill development. In summary, there is a very limited potential for cumulative impacts to wetlands; however, the No Action/No Project Alternative would not contribute to any cumulative impacts on wetlands based on the fact there would be no change in the status of jurisdictional wetlands on-site.

4.12.7.2 Alternatives A, B, and C

As indicated in subsection 4.12.6, *Environmental Consequences*, Alternatives A, B, and C would require the permanent conversion of the existing 1.3 acres subject to the jurisdiction of the USACOE from habitat to development as a result of construction staging, airfield operations and maintenance, and/or airfield improvements. This conversion would result in significant impacts to jurisdictional wetlands that exceed thresholds established by the USACOE pursuant to Section 404 of the Clean Water Act.

As described above, the potential for impacts to wetlands from other development projects in the local area is considered to be very limited. Additionally, induced growth associated with implementation of Alternatives A, B, or C will contribute to additional growth and development in the local area and region, although such development is likely to occur primarily as urban infill. The cumulative impacts on wetlands from development of the LAX Master Plan improvements and other past, present, and probable future projects in the area, and induced growth are considered potentially significant due to the limited amount of wetlands in the vicinity of the study area. However, there will be no net loss of habitat values as a result of the proposed Master Plan improvements, as the recommended mitigation measure is adequate to reduce the impacts to a less than significant level. Also, the loss of wetlands at other sites would be offset by implementation of the wetland mitigation requirements of state and federal regulatory agencies.⁶²⁵

4.12.7.3 Alternative D - Enhanced Safety and Security Plan

Alternative D would require the permanent conversion of 0.04 acres (1,853 square feet) subject to the jurisdiction of the USACOE as a result of construction staging, airfield operations and maintenance activities, and/or airfield improvements. This conversion would result in significant impacts to jurisdictional wetlands that exceed thresholds established by the USACOE pursuant to Section 404 of the Clean Water Act.

The potential for impacts to wetlands from other projects and ongoing growth in the local area, including growth induced by implementation of Alternative D, is considered to be very limited, based on the urban nature of the area and the likelihood that such projects would occur primarily as infill development. In summary, there is a very limited potential for cumulative impacts to wetlands. There would be no net loss of habitat values as a result of Alternative D as the recommended mitigation measure is adequate to reduce project impacts to a less than significant level. Also, the loss of wetlands at other project sites would be offset by implementation of the wetland mitigation requirements of state and federal regulatory agencies.

4.12.8 Mitigation Measures

Mitigation Measure MM-ET-1, Riverside Fairy Shrimp Habitat Restoration (Alternatives A, B, C, and D), recommended in Section 4.11, *Endangered and Threatened Species of Flora and Fauna*, would mitigate impacts resulting from the permanent conversion of 1.3 acres of jurisdictional wetlands under Alternatives A, B, and C and 0.04 acre (1,853 square feet) of jurisdictional wetlands under Alternative D.

Under Alternatives A, B, and C, implementation of Mitigation Measure MM-ET-1 would provide for replacement of 1.3 acres of degraded wetland habitat with estimated habitat value of 0.15 with 3.9 acres

⁶²⁵ See, e.g., California's Lake and Streambed Alteration Act (Cal. Fish and Game Code, Sections 1600 - 1616) and Regulatory Program administered by the State of California Department of Fish and Game (described at www.dfg.ca.gov/1600) and the federal Clean Water Act (Code of Federal Regulations, Sections 401-406) administered by the U.S. Environmental Protection Agency and enforced through the Regulatory Program of the U.S. Army Corp of Engineers (described at www.usace.army.mil/inet/functions/cw/cecwo/reg/).

(as determined by a 3:1 mitigation ratio) of created vernal pool habitat with an anticipated habitat value of 0.75 (see Table F4.11-5, Mitigation Land Evaluation Procedure for the Mitigation Site, in Section 4.11, *Endangered and Threatened Species of Flora and Fauna*).

Under Alternative D, implementation of Mitigation Measure MM-ET-1 would provide for the replacement of 0.04 acre (1,853 square feet) of degraded wetland habitat with estimated habitat value of 0.15 with 0.12 acres (5,559 square feet, as determined by a 3:1 mitigation ratio) of created vernal pool habitat with an anticipated habitat value of 0.75. In addition, the potential indirect affects to 1.26 acres of jurisdictional wetlands would be avoided through implementation of construction avoidance measures described in MM-ET-1.

Mitigation Measure MM-ET-1 has been recommended as part of the jurisdictional delineation submitted to the USACOE to fulfill the responsibilities of FAA and LAWA, pursuant to Section 404 of the Clean Water Act. With implementation of Mitigation Measure MM-ET-1, there would be no net loss of habitat functions or values.

Thus, the following mitigation measure from Section 4.11, *Endangered and Threatened Species of Flora and Fauna*, shall be implemented to mitigate impacts resulting from the permanent conversion of 1.3 acres of jurisdictional wetlands under Alternatives A, B, and C, and 0.04 acre (1,853 square feet) of jurisdictional wetlands under Alternative D.

- ◆ MM-ET-1. Riverside Fairy Shrimp Habitat Restoration (Alternatives A, B, C, and D).

4.12.9 Level of Significance After Mitigation

For each of the build alternatives (A, B, C, or D), implementation of Mitigation Measure MM-ET-1 would reduce impacts to wetlands to a level that is less than significant. For each of the build alternatives, the permanent conversion of wetlands is unavoidable. No practical alternative to construction in wetlands exists, however, all practical measures to avoid impacts have been included.

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