APPENDIX E

BIOLOGICAL RESOURCES ASSESSMENT

BIOLOGICAL RESOURCES ASSESSMENT

LONG BEACH SPORTS PARK

LONG BEACH, CALIFORNIA

LSA

April 2004

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BIOLOGICAL RESOURCES ASSESSMENT

EXISTING ENVIRONMENTAL SETTING

Overview

This section assesses the effects of the proposed project on biological resources within the study area. The location of the proposed project is illustrated in Figure 1: Project Location. The assessment is based on a review of literature sources and surveys of the project site. Since the 1930s, the site has been used for oil extraction, processing, and other industrial activities. The 55-acre site is surrounded by a variety of commercial and industrial land uses as well as the Sunnyside Cemetery immediately south of the project site. Virtually the entire site has been subject to severe disturbance by previous and ongoing industrial and petroleum-processing activities. Approximately 30 acres of the site is covered by vegetation. The remainder of the site is occupied by man-made structures, storage tanks, roadways, pump jacks, fences, barren graded areas, and extensive debris piles, with little or no vegetation. Trash, piping, concrete and asphalt rubble, and debris also occur throughout most of the vegetated areas on site. As is typical of highly disturbed areas, most of the dominant plant species present in the vegetated areas are nonnative, which provide very little habitat value for wildlife.

Assessment Methods. Reconnaissance-level botanical and sensitive species surveys were conducted by LSA Associates, Inc. (LSA) biologist Scott Holbrook during two site visits, on August 2 and 3, 1999, and subsequent visits by biologists Jim Harrison, Micaele Maddison, Mike Weller, Richard Erickson, and Marshall Iliff on March 25, 26, and 27 and April 12, 2003, to identify vegetation communities located within the proposed project site and to ascertain the presence or absence of sensitive plants and animals or the likelihood of their occurring in the proposed project area. These walkover surveys focused on identifying sensitive or significant biological resources that occur or could potentially occur on site, including habitat areas that could be suitable for sensitive species of wildlife. Vascular plant and vertebrate animal species encountered during these surveys were noted. An additional spring survey was conducted on site on June 9, 2003, from 10:45 a.m. until 3:00 p.m. by Micaele Maddison and Elizabeth Scheinbach to determine whether the southern tarplant (*Centromadia parryi* ssp. *australis*) was present within the project boundaries. Between the surveys in March and the survey in June, crumbled asphalt was deposited by the surface-rights owner on some of the roads within the southern portion of the site. An additional winter ornithological survey was conducted by Richard Erickson on February 13, 2004, from 8:30 a.m. until 10:45 a.m., to document the use of the site by wintering birds.

Due to the variability of the common names of plants, scientific names are included in the discussions of all plant species. Scientific names are generally omitted for animal names discussed elsewhere in the report because (1) the common names are virtually standardized for animal species, and (2) the scientific names for all plants and vertebrate animals observed in the study area during the surveys are included in the species lists in Appendix A and Appendix B.

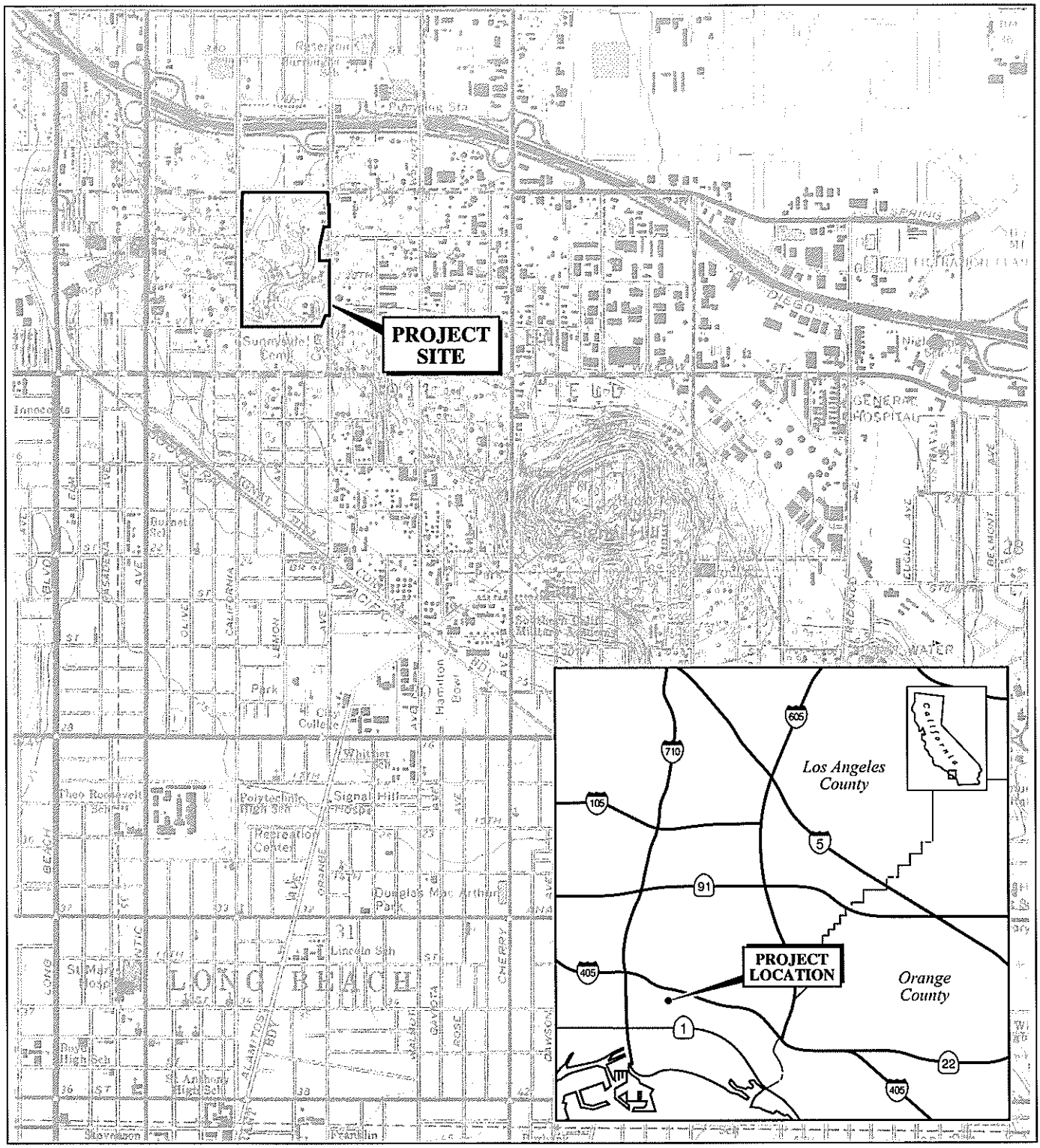

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FIGURE 1

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SOURCE: USGS 7.5" QUAD - LONG BEACH, CA.

Long Beach Sports Park

Project Location

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Plant Communities and Habitat Types

As a result of extensive grading, dumping, and intensive industrial uses on the site over approximately 70 years, most of the native habitat elements that once occurred here have been displaced by nonnative species and common local weeds well adapted to disturbed soil conditions. Most of the vegetated area of the site is appropriately characterized as ruderal or annual grassland, with occasional patches of mulefat scrub and ornamental vegetation such as clusters of ornamental trees introduced for landscaping purposes. A few areas near the existing concrete detention basin are dominated by cattail marsh. Figure 2: Habitat Map shows the location of various habitat types on the project site.

Ruderal. The dominant elements found in the ruderal grassland community, which covers 0.03 acre of the study area, include a variety of nonnative herbaceous species including mustard (*Brassica* and *Hirschfeldia* spp.), wild radish *(Raphanus sativus),* California burclover *(Medicago polymorpha),* white sweetclover *(Melilotus alba),* yellow sweetclover *(Melilotus indica),* cheeseweed *(Malva parviflora),* milk thistle *(Silybum marianum),* five-hook bassia *(Bassia hyssopifolia),* Russian-thistle *(Salsola tragus),* and castor bean *(Ricinis communis),* which are well adapted to disturbed soil conditions. Patches of Hottentot fig *(Carpobrotus edulis)* (also known as iceplant), a common nonnative succulent ground cover, are scattered through portions of the site. This disturbed ruderal community is of low habitat value to most local wildlife species and is not considered sensitive or significant as a biological resource by the resource agencies (the U.S. Fish and Wildlife Service and California Department of Fish and Game).

Mixed Ruderal/Annual Grassland. Most of the site (approximately 25.84 acres) is dominated by a mixture of ruderal and annual grassland habitat types. Nearly all the species in this community are of exotic origin. The dominant elements found in the annual grassland community include nonnative grasses such as wild oat (*Avena* spp.), foxtail chess *(Bromus madritensis* ssp. *rubeni),* foxtail barley *(Hordeum jubatum),* hare barley *(Hordeum murinum* ssp. *leporinum),* and Bermuda grass *(*C*ynodon dactylon).* This habitat type is typically interspersed with the ruderal vegetation community and has low habitat value. This habitat type is not considered sensitive or significant as a biological resource.

Ornamental. A number of ornamental shrubs and trees occur in patches either scattered through the annual grassland and ruderal vegetation communities or around several of the structures. A few dozen tall blue gum *(Eucalyptus globulus)* specimens and a few large date palms *(Phoenix canariensis),* which were presumably introduced as landscape elements, form a broken canopy of nonnative wood-land around several abandoned water tanks and pump jacks within the study area, as well as around several of the industrial buildings along the perimeter of the site. Other ornamental shrub and tree species scattered around the site include Peruvian pepper *(Schinus molle),* Mexican fan palm *(Washingtonia robusta),* magnolia tree *(Magnolia grandiflora),* ash (*Fraxinus* sp.), passion flower *(Passiflora caerulea),* and hottentot-fig *(Carpobrotus edulis).* The ornamental area covers 1.99 acres on the site.

LSA

Legend

Project Limits

Habitat Type

- Cattail / Marsh
- Mulefat Scrub
- Developed
- Open Water
- Ornamental
- Ruderal
- Ruderal / Annual Grassland

N

0 150 300

FEET

SOURCE: Eagle Aerial, 2002.

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FIGURE 2

Long Beach Sports Park
Habitat Map

Mulefat scrub. There are several patches of mulefat scrub on the site, which amount to 1.40 acres of the study area. Although mulefat is classified as a hydrophytic according to the National List of plants that occur in wetlands, it is a FacW designation, which means that it occurs in wetlands 67 to 99 percent of the time. Only two of these patches are associated with a water source. One is on a steep slope adjacent to a ponding area in the west portion of the site and another is adjacent to an existing graded dirt access road that also ponds water. Otherwise, these patches are scattered on slopes throughout the site.

Developed. The developed area within the boundaries of the property (approximately 20.32 acres) consists of the multiple oil wells, tanks, pump jacks, and several industrial buildings and concrete foundations.

Roads. There are several existing graded dirt and paved roads, with associated parking and turnaround areas that bisect the site. This area amounts to 4.34 acres of the study area.

Open water. There are two patches of open water within the study area. One, which is 0.05 acre, is associated with a ponding area on the west side of the site, and the other, which is 0.31 acre, is associated with the detention basin in the middle of the site. The size of the area of open water will fluctuate given the amount and timing of rainfall.

Cattail marsh. There were two areas of cattail marsh associated with the detention basin within the study area. One occurs on sediment deposits on the concrete perimeter drainage ditch, and the other is on a sediment deposit within the detention basin. The dominant species in this habitat type is broad-leaved cat-tail *(Typha latifolia).* Another species that occurred in this habitat type was African umberella-sedge *(Cyperus involucratus).* In addition, Goodding's black willow *(Salix gooddingii)* occurs within the drainage. The total area of this habitat type within the study area is 0.19 acre.

Wildlife

The proposed project site is characterized predominantly by disturbed/ruderal grassland habitat and considerable waste and debris. Wildlife species occurring within the project site are characteristic of those found in disturbed/ruderal areas. A list of animal species (including scientific names) observed during the surveys in 1999, 2003, and February 2004, are provided in Appendix B.

Western toad and Pacific treefrogs are amphibians that were observed in suitable amphibian habitat and in the ponding areas on site during the surveys. Three reptile species were observed on site during the surveys: Western fence lizard, southern alligator lizard, and side-blotched lizard.

Disturbed/ruderal grassland located throughout the site provides foraging habitat for a variety of granivorous bird species and raptor species. Bird species observed on site include mourning dove, black phoebe, American crow, northern mockingbird, house finch, and house sparrow. Raptor species such as red-tailed hawk, sharp-shinned hawk, and American kestrel were observed over the site during the surveys. One pair of red-tailed hawks was observed nesting in the eucalyptus grove

adjacent to the detention basin during the surveys. One pair of loggerhead shrikes was observed foraging and nesting in the vegetation adjacent to the detention basin during the surveys. Owls, such as the great horned owl and barn owl, were not observed; however, they may be present on site.

Mammalian species observed during the surveys include Beechey ground squirrel, Audubon cottontail, opossum, Botta pocket gopher, raccoon, feral cat, and tracks of either coyote or domestic dog. The Beechey ground squirrel, Audubon cottontail, and Botta pocket gopher may serve as prey for raptor species. Tracks observed within one of the graded dirt access road were assumed to be those of striped skunk.

Wildlife Movement

Large areas of habitat or narrower linkages of habitat between expanses of open space provide movement corridors for wildlife. The spatial relationship of food, water, and cover is generally of greatest importance, with movement patterns in temperate areas of California following a daily (rather than seasonal) cycle. Movement serves to facilitate the geographic distribution of genetic material, thus maintaining a level of variability in the gene pool of an animal population. Influxes of animals from nearby larger populations contribute to the genetic diversity of a local population, helping ensure the population's ability to adapt to changing environmental conditions. Movement may occur in small groups, but most often is executed individually. Wildlife generally travel along prominent features, such as ridgelines, drainages, canyons, or riparian areas that provide necessary resources (e.g., food, water, cover). Many plant species that depend on relatively sedentary insects for pollination also benefit from habitat linkages that allow for genetic exchange and dispersal. Reduced insect movement due to habitat fragmentation results in reduced genetic vigor in those plants.

The purpose of designated wildlife corridors is to ensure the future viability and movement through preservation of necessary habitat and wildlife movement areas. Typically these "corridors" should be considered "travel routes" by definition. This means that landscape features such as ridgelines, drainages, canyons, or riparian strips within the larger natural habitat area are used frequently by animals to facilitate and provide access to necessary resources, whereas corridors are a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another.

The parcel is isolated from native habitat or other substantial open space areas by extensive industrial and commercial development, as well as the extensive road network that surrounds the proposed sports park. In addition, much of the parcel is bounded by a chain-link fence, which will reduce the movement of animals through the area. While there may be some local movement of species that are adapted to the human altered environment, the project area does not serve an important function with respect to local or regional wildlife movement between natural areas.

As with all undeveloped areas along the Pacific Coast, this area may be used as a stopover during bird migration in the so-called "Pacific Flyway." Birds will use the ponding water and vegetation on site for food, water, and cover during a resting period. However, all open areas, including urban parks, and even vegetated residential areas are used in the same manner by some species. With respect to water-oriented birds, the open water on the site provides some function during migration periods, but this is relatively insignificant compared with larger, more permanent water bodies on the immediate coast and in larger parks, reservoirs, and lakes in Southern California.

Sensitive Biological Resources

Sensitive Species. Legal protection of sensitive species varies widely, from the comprehensive protection afforded species listed as endangered and/or threatened to no legal status at present. The California Department of Fish and Game (CDFG), U.S. Fish and Wildlife Service (USFWS), local agencies, and various special-interest groups (e.g., California Native Plant Society [CNPS]) publish watch lists of declining species. These lists often describe the nature and perceived severity of the species decline. In addition, recently published findings and preliminary results of ongoing research provide a basis for consideration of species that are candidates for State and/or federal listing. Finally, species that are clearly not rare or threatened either statewide or regionally, but whose local populations are sparse, rapidly dwindling, or otherwise unstable, may be of "local interest."

For purposes of this discussion, the term "sensitive species" refers to those plants and animals occurring, or potentially occurring, on the property and are designated as endangered or rare (as defined by CEQA and its Guidelines), or of current local, regional, or State concern. These are species that are rare, locally restricted, or declining in a significant portion of their range. Inclusion in the sensitive species analysis for this property is based on the following criteria: (1) direct observation of the species on the property during one of the biological surveys conducted for this report; (2) record reported by the California Natural Diversity Data Base (CNDDB); or (3) property contains appropriate habitat and is within the known range of a given species. A variety of sources was used to establish the list of sensitive species potentially affected by the project. A foundation for the list of sensitive species within the study area is established by reviewing the CNDDB and CNPS databases. However, these databases are frequently modified and are not considered a complete list of identified species within a particular area. Therefore, to augment these lists, LSA utilizes local experts with knowledge of the study area, reconnaissance surveys, and agency biologists.

Several sensitive plant and animal species were identified in the initial literature search that were subsequently excluded from further consideration because either the property lacks suitable conditions to support these species or the site is located well beyond their normal range.

For this section, sensitive species are broken down into those that are listed as endangered or threatened by the State and/or federal agencies and those that are not listed as such. Plant communities/habitats of concern are considered separately. Table 3.5.A summarizes the status of those sensitive species known to occur or potentially occur on the property.

Table 3.5.A: Summary of Sensitive Species

Species	Habitat and Distribution	Activity/Blooming Period	Status Designation[1]		Probability of Occurrence[2]
SPECIES LISTED OR PROPOSED FOR LISTING					
VASCULAR PLANTS					
Salt marsh bird's-beak *Cordylanthus maritimus* ssp. *maritimus*	Coastal salt marshes & coastal dunes below 35 ft. elev. from San Luis Obispo County to Baja Calif. Known locally from Anaheim Landing (ca. 1983).	May–Oct.	Fed.: State: CNPS:	FE CE 1B	**Absent**. Site lacks suitable conditions.
BIRDS					
California Least Tern *Sterna antillarum browni*	Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Spring and fall	Fed.: State:	FE CE	**Low**. Individuals may pass through the area, but site lacks suitable nesting or foraging habitat.
MAMMALS					
Pacific pocket mouse *Perognathus longimembris pacificus*	Historically occupied open habitats on sandy soils along the coast from Los Angeles to the Mexican border. Now known from only four sites in Orange and San Diego Counties.	Mar.–Oct.	Fed.: State:	FE CSC	**Absent**. Conditions on site are unsuitable for this species; native habitat is extremely limited, isolated, and highly degraded; no suitable soils.
SPECIES NOT LISTED NOR PROPOSED FOR LISTING					
VASCULAR PLANTS					
Parish's brittlescale *Atriplex parishii*	Alkali meadows, alkali flats, chenopod scrub, & vernal pools throughout cismontane So. Calif. to edges of deserts. Historically known from Los Angeles and San Bernardino counties to Baja Calif. Collected only once (1993) in Calif. since 1974.	Jun.–Oct.	Fed.: State: CNPS:	** --- 1B	**Absent**. Historic records of occurrences in Long Beach area. Currently presumed extirpated from region. No suitable habitat within study area.
Southern spikeweed *Centromadia parryi* ssp. *australis*	Coastal salt marsh margins, vernally mesic grasslands, vernal pools, often in ruderal, disturbed areas (ditches, road cuts, etc.).	Jun.–Nov.	Fed.: State: CNPS:	** --- 1B	**Low**. Suitable habitat is present but was not observed during spring surveys.
Prostrate navarretia *Navaretia prostrata*	Coastal scrub and valley and foothill grasslands in alkaline soil conditions. Vernal pools, mesic.	April–July	Fed.: State: CNPS:	--- --- 1B	**Absent**. No suitable habitat within study area.

Species	Habitat and Distribution	Activity/Blooming Period	Status Designation[1]	Probability of Occurrence[2]
				Absent. No suitable habitat within study area.
Coastal woolly-heads *Nemacaulis denudata* var. *denudata*	Coastal strand and beaches, from Ventura County to northwest Mexico.	Apr.–Sep.	Fed.: --- State: --- CNPS: 2	
INSECTS				
Sandy beach tiger beetle *Cicindela hirticollis gravida*	Inhabits areas adjacent to nonbrackish water along the coast of California from San Francisco Bay to northern Mexico. Micro habitat includes clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Year-round	Fed.: - State: None	**Low.** Habitat appears to be unsuitable.
Monarch *Danaus plexippus*	Varied habitats throughout much of North and South America; milkweeds required for breeding.	Year-round	Fed.: -- State: CSA	**Low.** Occasional visitors are likely, but no overwintering roosts appear to be present.
REPTILES				
Silvery legless lizard *Anniella pulchra pulchra*	Inhabits loose soil and humus from central California to northern Baja California.	Year-round	Fed: ** State: CSC	**Low.** Habitat appears unsuitable.
San Diego horned lizard *Phrynosoma coronatum blainvillii*	Wide variety of habitats including coastal sage scrub, grassland, riparian woodland; typically on or near loose sandy soils; coastal and inland areas from Ventura County to Baja Calif.	Apr. - Jul. (with reduced activity Aug. - Oct.)	Fed.: ** State: CSC	**Low**. Habitat appears unsuitable.
BIRDS				
Loggerhead shrike *Lanius ludovicianus*	Open fields with scattered trees, open woodland, scrub. Fairly common resident throughout Southern California	Year-round	Fed: --- State: CSC	**Observed**. Nesting shrikes observed on site during surveys.
White-Tailed Kite *Elanus leucurus*	Open country in South America and southern North America.	Year-round	Fed: --- State: CSC	**Low.** Requires extensive grassland habitats for foraging.
Northern harrier *Circus cyaneus*	Grassland and marshy habitats in Southern California. Uncommon in open desert and brushlands.	Year-round	Fed: --- State: CSC	**Low.** Requires extensive grassland habitats for foraging.
Sharp-shinned hawk *Accipiter striatus*	Primarily forests and woodlands of the Americas.	Sept. - April	Fed.: --- State: CSC	**Observed.**

Species	Habitat and Distribution	Activity/Blooming Period	Status Designation[1]	Probability of Occurrence[2]
Cooper's hawk *Accipiter cooperi*	Primarily forests and woodlands throughout North America.	Year-round	Fed.: --- State: CSC	**Moderate.** Habitat appears marginal.
Merlin *Falco columbarius*	Open country; breeds in the Holarctic Region and winters south to the tropics. Rare fall migrant and winter visitor to Southern California.	Fall & winter	Fed: --- State: CSC	**Moderate.** Generally rare and local, but foraging birds may occur almost anywhere.
American peregrine falcon *Falco peregrinus anatum*	Widespread but scarce and local throughout North America. Currently nests on buildings and bridges in the L.A. Basin.	Year-round	Fed: -- State: END	**Low.** May forage infrequently in the area. No suitable nesting habitat on site.
Western burrowing owl *Athene cunicularia hypugea*	Grasslands and rangelands, usually occupying ground squirrel burrows. Resident over most of Southern California. Found in agricultural areas.	Year-round	Fed: --- State: CSC	**Low.** Now very rare in the region.
California horned lark *Eremophila alpestris actia*	Open grasslands and fields, agricultural areas, open montane grasslands. Southern California common resident in interior, common transient and winter visitant along coast, common summer resident.	Year-round	Fed: C3c State: CSC	**Low.** Prefers extensive open grassland habitats.
Tricolored blackbird *Agelaius tricolor*	Freshwater marshes, grasslands, and agricultural lands; coastal California, Central Valley, to Baja California.	Year-round	Fed.: ** State: CSC	**Low**. Rare in the L.A. Basin. Prefers open grassland for foraging.
MAMMALS				
Yuma myotis *Myotis yumanensis*	Varied habitats in western North America.	Warmer months	Fed: -- State: **	**Low.** Habitat appears unsuitable. Rare in urban areas.
Small-footed myotis *Myotis ciliolabrum = leibii*	Varied habitats throughout much of North America.	Warmer months	Fed: -- State: **	**Low.** Habitat appears unsuitable. Rare in urban areas.

1. For a description of status designations, see Legend on following page.

2. Based on the following categories: **Absent**; **Low**; **Moderate**; **High**; **Observed**.

Legend: Status Designation

FEDERAL STATUS

FE	Federally listed as Endangered.
FT	Federally listed as Threatened.
PE	Federally proposed as Endangered.
PT	Federally proposed as Threatened.

Note: The U.S. Fish and Wildlife Service (USFWS) has recently revised its classification system for candidate taxa (species, subspecies, and other taxonomic designations), as described below.

C	Certain species formerly designated as "Category 1" (C1) and a few "category 2" (C2) candidates for federal listing are now known as "Candidate." Refers to taxa for which the U.S. Fish and Wildlife Service (USFWS) has sufficient information available to support a proposal to list as Endangered or Threatened. Issuance of the proposal(s) is anticipated, but precluded at this time.
**	Species formerly designated as "category 1" (C1) or "Category 2" (C2) candidates for federal listing; not designated presently as "candidate" species, these C1 and C2 designations have been discontinued by the USFWS. The State now refers to these taxa as "species of Concern."
C3a	Species considered to be extinct.
C3b	Former federal candidate for listing as Endangered or Threatened, but which is not believed by the Service to represent a distinct taxa meeting the Endangered Species Act's definition of a "species". Species taxonomically invalid.
C3c	Former federal candidate for listing as Endangered or Threatened, but which has been determined by the Service to be too widespread and/or not threatened at this time.

STATE STATUS

CE	State listed as Endangered.
CT	State listed as Threatened.
CR	State listed as Rare.
CFP	California Fully Protected. Species legally protected under special legislation enacted prior to the California Endangered Species Act.
CCE	State candidate for listing as Endangered.
CCT	State candidate for listing as Threatened.
CSC	California Species of Special Concern. These are taxa with pops. declining seriously or otherwise highly vulnerable to human developments.
CSA	Species included on the California Department of Fish and Game's list of "Special Animals" of California. No specific designation assigned.

CALIFORNIA NATIVE PLANT SOCIETY LISTING

1A	List of plants presumed extinct in California.
1B	List of plants considered by the California Native Plant Society (CNPS) to be Rare, Threatened, or Endangered in California and elsewhere.
2	List of plants considered by CNPS to be Rare, Threatened, or Endangered in California, but more common elsewhere.
3	CNPS review list of plants suggested for consideration as Endangered but about which more information is needed.
4	CNPS watch list of plants of limited distribution, whose status should be monitored.

Sensitive Plant Species. No federally listed, State listed, proposed endangered, threatened, or sensitive plant species were observed on the site during the surveys. One federally and State listed as endangered plant species was identified in the literature review as potentially occurring on site or in the study area. This species is salt marsh bird's beak *(Cordylanthus maritimus* ssp. *maritimus)*, which is found in saline coastal situations such as coastal dunes, marshes, and swamps. There are no saline wetlands on the site. Therefore, this species is unlikely to occur on site. The literature search identified four additional sensitive plant species as potentially occurring within the study area, all of which are California Native Plant Society (CNPS) List 1B. Parish's brittlescale *(Atriplex parishii)* typically occurs in chenopod scrub or vernal pools on playas. No chenopod scrub or vernal pools were identified within the project boundaries. Therefore, this species is not anticipated to occur within the project boundaries. Prostrate navarretia *(Navarretia prostrata)* occurs in various habitats including coastal scrub, alkaline soils in valley and foothill grassland, or in mesic areas such as vernal pools. None of these habitats were identified within the project boundaries; therefore, this species is not expected to occur within the project boundaries. Coast woolly-heads *(Nemacaulis denudata* var. *denudata)* occurs within coastal dunes. None of the project limits are within coastal dunes. Therefore, this species is not anticipated to occur within the project boundaries. Southern spikeweed *(Centromadia parryi* ssp. *australis)* occurs in the margins of marshes and swamps or in vernally mesic valley and foothill grassland. This species may occur in disturbed habitats and in tire rills of roads. Crumbled asphalt had been deposited on a portion of the roads within the southern portion of the site between the survey conducted in March and the focussed survey for this species in June. This species could potentially have occurred within the areas where road maintenance occurred; however, the areas surrounding the road maintenance activities were surveyed extensively for this species during the focused survey during the optimal flowering period (April through September) and no occurrences of this species were noted within the study boundaries; therefore, this species is not expected to occur within the study boundaries.

Sensitive Wildlife Species. Two federally listed animal species were identified in the literature search as potentially occurring within the project area. One is the California least tern, a federally and State listed as endangered species. This species nests along the coast from San Francisco Bay south to northern Baja California. The other—the Pacific pocket mouse, which is federally listed as endangered—inhabits the narrow coastal plain from the Mexican border north to El Segundo. Neither of these species were expected to occur on the project site because of the lack of suitable habitat and were not observed. The loggerhead shrike is a California Department of Fish and Game species of special concern. These are taxa with populations that are declining seriously or otherwise highly vulnerable to human developments. The loggerhead shrike has declined over the last decade throughout southwestern California. While the decline in population in this region reflects the population decline for this species in much of the United States, the problem is more acute in coastal Los Angeles County, where few breeding pairs of loggerhead shrikes are known to exist.

Nesting pairs of red-tailed hawks, although protected during nesting by the Migratory Bird Treaty Act, are widespread throughout North America, and their populations are maintaining healthy levels.

Loggerhead shrikes would potentially use the adjacent cemetery for foraging due to the open space areas, trees and other ornamental vegetation, and limited potential interaction with people.

The remaining sensitive species that have a probability of occurring on the site are identified in Table 3.5.A, the Summary of Sensitive Plant Species.

Sensitive Habitats. Habitats are considered to be sensitive biological resources based on (1) federal, State, or local laws regulating their development; (2) limited distributions; and/or (3) the habitat requirements of sensitive plants or animals occurring on the site.

Wetlands and Streambeds. Streambeds and wetland areas are often regulated by both the U.S. Army Corps of Engineers (Corps) and the California Department of Fish and Game (CDFG) as described below under "Regulatory Setting." In addition, wetlands are of limited distribution and are often of high value to ecosystems. Thus, they are considered sensitive resources. The total length of the drainage course associated with the detention basin within the project site is approximately 250 feet. The vegetation within the sediment deposits in this concrete-lined channel is cattail marsh, which totals 0.08 acre. The vegetation within the drainage area meets the federal criteria for wetlands and the CDFG's criteria for jurisdictional waters of the State. In addition, the detention basin associated with this drainage, which amounts to 0.41 acre, would be considered jurisdictional by both the federal and State agencies. Figure 3: Jurisdiction Areas, shows the location of jurisdictional wetlands on the project site.

The pond on the western portion of the project site appears to support some riparian vegetation. However, due to the isolation, small size, and shallowness of the pond, it would not be subject to Corps or CDFG jurisdiction. Please see Appendix C, Wetlands Delineation Report, for more information.

Regulatory Setting

Endangered and Threatened Species. The State and federal Endangered Species Acts prohibit the unauthorized "take" of species listed as threatened or endangered under the provisions of those acts. Because such species are not expected to occur on the project site, the specific provisions of the regulations implementing those acts are not discussed further.

Streambeds

Jurisdictional Waters of the United States. The U.S. Army Corps of Engineers regulates discharges of dredged or fill material into "Waters of the United States." These waters include wetlands and nonwetland bodies of water that meet specific criteria. Corps regulatory jurisdiction pursuant to Section 404 of the Clean Water Act is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations. However, a recent U.S. Supreme Court decision *(Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers)* held that the use of waters by migratory birds

LSA

Legend

Project Limits
Photo Location
Sample Location

Habitat Type (with Acreage)
Cattail / Marsh
Mulefat Scrub
Open Water

N

0 150 300
FEET

SOURCE: Eagle Aerial, 2002.

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FIGURE 3

Long Beach Sports Park
Jurisdictional Areas

does not constitute an interstate commerce connection and that, in the absence of some other interstate "commerce connection," isolated waters such as the ponding area on the west side of the subject site, are not subject to Corps jurisdiction.

The discharge of fill material into waters of the United States requires a Section 404 authorization issued by the Corps. This authorization typically requires an application or notification that addresses specific information requirements, which typically includes a project description, a delineation of the affected waters, and a mitigation proposal. Certain discharges can be authorized under an existing nationwide permit (NWP), which authorizes certain residential, commercial, and institutional developments, provided all specific and general NWP conditions are met. If a project is not eligible for authorization under an existing nationwide or general permit, an individual permit (IP) is required.

Any project that is authorized by the Corps, whether by NWP or IP process, must comply with applicable federal regulations, such as the Endangered Species Act, the National Historic Preservation Act (for protection of cultural resources), and Section 401 of the Clean Water Act, which is administered by the State Water Resources Control Board through the Regional Water Quality Control Boards.

California Department of Fish and Game. The CDFG, through Sections 1601 and 1603 of the California Fish and Game Code provisions of the State of California Administrative Code, is empowered to issue agreements for any alteration of a river, streambed, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed, banks, and at least an intermittent flow of water. CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFG.

Although the CDFG does not have a formal definition of a lake noted in its guidelines, a lake is defined by the U.S. Fish and Wildlife Service (Cowardin et al., 1979) as all wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent area coverage; and (3) total area exceeds 20 acres. Similar wetland and deepwater habitats totaling less than 20 acres are also classified in the Lacustrine system if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 6.6 feet at low water. Therefore, according to this definition, the 0.005-acre ponding area on the west side of the study area would not classify as a lake and would not be subject to CDFG jurisdiction.

CDFG regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by CDFG.

Nesting Birds. The federal Migratory Bird Treaty Act regulations and portions of the California Fish and Game Code prohibit the "take" of nearly all native bird species and their nests. While these laws and regulations were originally intended to control the intentional take of birds and/or their eggs and nests by collectors, falconers, etc., they can nevertheless be applied to incidental take, e.g., destroying an active nest by cutting down a tree. In some cases, it is possible to obtain permits for relocating or removing nests.

A biological reconnaissance of the proposed mitigation area was conducted by LSA biologist Micaele Maddison on foot from 7:00 a.m. until 8:03 a.m. on March 17, 2004. The proposed mitigation area is located in a Southern California Edison (SCE) easement between El Dorado Golf Course, the San Gabriel River, Spring Street, and Willow Street in the City of Long Beach, California. The proposed mitigation area consists of two separate areas, one on the north side of an existing pump house and associated concrete storage reservoir and one in the area south of this pump house and associated reservoir. Although the north area could not be accessed during the on-site survey due to extensive fencing, both areas appear to be very similar in that they have mainly flat topography and sandy soils. Aside from the Southern California Edison (SCE) lattice tower and chain-link fencing, the proposed mitigation site is surrounded by parkland dominated by ornamental landscaping.

The habitat on site is mainly nonnative annual grassland dominated by grasses and forbs with some patches of ornamental trees. The dominant plant species include ripgut grass *(Bromus diandrus).* Other plant species that occur in the project area include foxtail barley *(Hordeum jubatum),* summer mustard *(Hirschfeldia incana),* wildoat *(Avena fatua),* red-stemmed filaree *(Erodium cicutarium),* and telegraph weed *(Heterotheca gradiflora).* Ornamentals that occur scattered throughout the area include Brazilian pepper *(Schinus terebinthifolius),* Peruvian pepper *(Schinus molle)* and tree of heaven *(Ailanthus altissima).* Due to previous grading for the installation of the SCE towers and associated fences and scattered trash and debris, the habitat condition on site is poor.

The animal species observed during the site visit are typical of developed parks and grassland areas, such as the American crow *(Corvus brachyrhynchos),* house sparrow *(Passer domesticus),* house finch *(Carpodacus mexicanus),* European starling *(Sturnus vulgaris),* mourning dove *(Zenaida macroura),* black phoebe *(Sayornis nigricans),* California towhee *(Pipilo crissalis),* American goldfinch *(Carduelis tristus),* rock pigeon *(Columba livia),* and song sparrow *(Melospiza melodia).* One raptor, a red tailed hawk *(Buteo jamaicensis),* was observed perched on a lattice tower within the SCE easement. However, no nests were observed within any of the lattice towers at the time of the site visit.

No sensitive or special interest animal species (i.e., listed species, species proposed for listing, or candidate species) were observed or otherwise detected on site at the time of the site visit. The site does not contain, nor is it adjacent to, any suitable habitat for any sensitive species.

The adjacent San Gabriel River is a concrete-lined flood control channel. The site did not contain any federal or State jurisdictional areas. Waters of the U.S. were absent from the site; no water bodies having a perceptible OHWM were identified on site, and no wetland resources were observed. Also, no streambed or riparian habitat was present on site.

Biological Impacts Analysis

Based on the high level of disturbance associated with the previous construction of the San Gabriel River Channel and installation of the SCE towers and the nonnative nature of the habitat within the boundary, the proposed mitigation installation is not expected to result in any significant impacts to biological resources.

Wetlands Impacts Analysis

No jurisdictional areas, including wetlands, exist on the project site. Therefore, the installation of the proposed mitigation at this location will not result in any impacts to jurisdictional areas (e.g., wetlands).

Suitability for Wetlands Mitigation

While the site appears to have reasonable suitability for wetlands mitigation, the final design of the mitigation site should include consideration of the following two site characteristics: (1) porous, sandy soils; and (2) any constraints imposed by the SCE lines on vegetation height. The site should be designed so that adequate water is available in the root zone of the plants and so that trimming of trees is not necessary.

PROJECT IMPACTS

The following discussion identifies quantitative and qualitative impacts to biological resources as a result of the proposed project.

Less Than Significant Effects

Loss of Nonsensitive Habitat and Associated Species. The project will result in the loss of 11.26 27.83 acres of ruderal/annual grassland, ornamental plantings, as well as 20.32 acres of developed and barren areas on the remaining portions of the 55-acre site. In addition, 0.31 acre open water and 0.19 acre cattail marsh associated with the detention basin, as well as 0.05 acre of open water associated with the ponding area on the western side of the study area will be removed by the installation of the proposed project.

The loss of disturbed, mostly nonnative, habitat and the associated reduction of locally common wildlife populations are not considered significant impacts by resource agencies and by the thresholds included in Appendix A of the California Environmental Quality Act (CEQA) Guidelines. The loss of open water and associated cattail marsh would be considered insignificant due to the small size and isolation of the habitats.

Less Than Significant Impacts

This area is expected to continue to serve a relatively minor function as a stopover in the “Pacific Flyway” used by birds during migration. Urban parks, residential backyards, and street trees all serve to support birds during migration. Therefore, given the extent of urban landscaping in Long Beach, the existence of larger parks with substantial water bodies, and the fact that the area will be redeveloped into a park-like facility, the loss of this habitat with respect to use by migratory birds is considered less than significant.

Impacts That Require Mitigation

Within the context of the habitat loss described above, two types of impacts are not considered significant under the significance threshold criteria listed above but nevertheless require mitigation to ensure compliance with State and federal regulations pertaining to loss of habitat on site.

Impact: Potential Disturbance of Nesting Birds. Several species that potentially occur in this "habitat," particularly birds of prey such as red-tailed hawks and loggerhead shrikes are protected during nesting by State law and/or by the federal Migratory Bird Treaty Act. While loss of trees on the site is not considered a significant biological impact, destruction of active nests for most avian species is legally prohibited.

Mitigation Measure. Tree and shrub removals should be restricted to the period from August 1 to December 31, which is outside the normal nesting season for most raptors and other birds protected by the Migratory Bird Treaty Act. If it is necessary to conduct tree and shrub removal between December 31 and August 1, a qualified biologist must first survey the area for active nests prior to removal and shall also be present to monitor the removal process (if trees are removed during the breeding season). In the event of discovery of active nests in an area to be cleared, protective measures shall be taken to avoid any impacts to those nests until the nesting activity is completed.

Impact: Drainage Course Impacts Requiring Permits. Grading of the project will result in filling of 0.08 acre of riparian habitat in a concrete drainage course and 0.41 acre within the associated detention basin, both of which are subject to Corps of Engineers and California Department of Fish and Game jurisdiction. In addition, virtually all streambeds and associated plant communities are considered sensitive biological resources and are regulated by agencies as described in the Regulatory Setting Section. Therefore, impacts to these areas will require mitigation.

Mitigation Measure. Prior to the issuance of grading permits, the applicant must obtain the authorizations from: (1) the Corps of Engineers under the Section 404 Permit program for the discharge of fill material into the jurisdictional drainages; and (2) the California Department of Fish Game under Section 1601 of the California Fish and Game Code. In addition, standard conditions of the Corps permits require Section 401 water quality certification by the Regional Water Quality Control Board. In order to obtain these authorizations, the City shall develop a mitigation plan to compensate for the loss of riparian habitat.

Impact: Wetlands are of limited distribution and are often of high value to ecosystems. Thus, they are considered sensitive resources. The total length of the drainage course associated with the detention basin within the project site is approximately 250 feet. The vegetation within the sediment deposits in this concrete-lined channel is cattail marsh, which totals 0.08 acre. The vegetation within the drainage area meets the federal criteria for wetlands and the CDFG's criteria for jurisdictional waters of the State. In addition, the detention basin associated with this drainage, which amounts to 0.41 acre, would be considered jurisdictional by both the federal and State agencies.

Mitigation Measure. The City shall develop off-site mitigation for wetlands, including the restoration of 0.6 acre of riparian habitat (2:1 mitigation ratio for 0.08 acre of cattail marsh in the channel, and 1:1 mitigation ratio for the 0.41 acre of wetlands in the detention basin). The total wetlands mitigation requirement is 0.6 acre. The proposed mitigation site is located on the west bank of the San Gabriel River adjacent to El Dorado Park golf course and shall be made part of the Section 404 Permit.

This mitigation measure will mitigate for the jurisdictional impacts, as well as the proposed project contribution to cumulative impacts resulting from the loss of the pond on the western side of the project area, even though it is not jurisdictional.

Mitigation Measure. The on-site stilling basin will be planted with California native wetland species. The stilling basin will be subject to routine maintenance and cleaning. The planting of native wetland species in the stilling basin is provided in addition to the 0.6-acre off-site mitigation area.

Impact: The impacts to the nesting loggerhead shrikes within the project area will result in a contribution to a cumulative impact on this species.

Mitigation Measure. Prior to issuance of grading permits, project plans shall specify a native vegetation area adjacent to the southern boundary of the project site in order to create open habitat with isolated patches of dense shrubs suitable for nesting by the loggerhead shrike. This area shall not be less than 25 feet in width. The native vegetation area will be located adjacent to the cemetery, which may provide a suitable area for foraging. The planting shall extend along the top of the slope. Plant material in the native vegetation area will include coyote brush *(Baccharis pilularis)*and needlegrass (*Nassella* sp.), as well as elderberry *(Sambucus mexicana)* planted in isolated clumps rather than uniformly. Understory species and any species that might be too invasive (e.g., mulefat, *Baccharis salicifolia*) will be avoided, as they would alter the open habitat quality of the potential nesting area.

CUMULATIVE IMPACTS

The project's impact on riparian habitat is a small, incremental contribution to the loss of riparian/ wetland habitat in the region that may be considered cumulatively significant when combined with the loss of other regional riparian resources. This contribution to cumulative impacts is offset by the mitigation measure above.

The project's impacts to disturbed ruderal and ornamental vegetation are not cumulatively considerable because these habitats are common, are not regionally sensitive, and do not support sensitive species.

The impacts to the nesting loggerhead shrikes within the project area will result in a contribution to a cumulative impact on this species. To create potential breeding habitat on the site for this species, coyote brush will be planted on a slope on the southwest corner of the site adjacent to the existing

cemetery to create an open habitat with isolated patches of dense shrubs suitable for nesting by the loggerhead shrike. While the planting of native habitat on the southwestern portion of the site will provide some habitat for the loggerhead shrike in association with potential foraging habitat in the cemetery, continued breeding by this species may not occur. Therefore, the loss of breeding territory for the loggerhead shrike may not be fully mitigated and would result in a contribution to significant cumulative impacts.

APPENDIX A

PLANT SPECIES OBSERVED

APPENDIX A: PLANT SPECIES OBSERVED

The following vascular plant species were observed in the study area by LSA biologists Jim Harrison, Micaele Maddison, Richard Erickson, and Mike Weller during site surveys conducted on March 25, 26 and 27, 2003 and LSA Biologists Micaele Maddison and Nicole Carlier on September 15, 2003.

* Introduced, nonnative species

ANGIOSPERMAE: DICOTYLEDONAE DICOT FLOWERING PLANTS

Aizoaceae		**Carpet-weed Family**
*	*Carpobrotus edulis*	Hottentot-fig
*	*Mesembryanthemum crystallinum*	Crystal ice plant
*	*Mesembryanthemum nodiflorum*	Small-flowered ice plant
Anacardiaceae		**Sumac Family**
*	*Schinus molle*	Peruvian pepper tree
*	*Schinus terebinthifolius*	Brazilian pepper tree
Apiaceae		**Carrot Family**
*	*Apium graveolens*	Common celery
*	*Conium maculatum*	Poison hemlock
*	*Foeniculum vulgare*	Sweet fennel
Apocynaceae		**Dogbane Family**
*	*Nerium oleander*	Oleander
Asteraceae		**Sunflower Family**
	Ambrosia psilostachya	Western ragweed
	Baccharis salicifolia	Mulefat
*	*Centaurea melitensis*	Tocalote
*	*Centaurea solstitialis*	Yellow star-thistle
*	*Chrysanthemum coronarium*	Garland chrysanthemum
*	*Cirsium vulgare*	Bull thistle
*	*Conyza canadensis*	Common horseweed
*	*Gazania linearis*	Gazania
	Gnaphalium luteo-album	Weedy cudweed
	Helianthus annuus	Western sunflower
	Heterotheca grandiflora	Telegraph weed
*	*Lactuca serriola*	Prickly lettuce
*	*Picris echioides*	Bristly ox-tongue
*	*Silybum marianum*	Milk thistle
*	*Sonchus asper* ssp. *asper*	Prickly sow-thistle
*	*Sonchus oleraceus*	Common sow-thistle
	Stephanomeria sp.	wreath-plant
*	*Taraxacum officinale*	Common dandelion

*	*Xanthium strumarium*	Common cocklebur
Boraginaceae		**Borage Family**
	Amsinckia menziesii var. *intermedia*	Common fiddleneck
Brassicaceae		**Mustard Family**
*	*Brassica nigra*	Black mustard
*	*Brassica rapa*	Field mustard
*	*Hirschfeldia incana*	Shortpod mustard
*	*Lobularia maritima*	Sweet-alyssum
*	*Raphanus raphanistrum*	Jointed charlock
*	*Raphanus sativus*	Wild radish
*	*Sisymbrium irio*	London rocket
Caryophyllaceae		**Pink Family**
*	*Stellaria media*	Common chickweed
Chenopodiaceae		**Goosefoot Family**
*	*Atriplex semibaccata*	Australian saltbush
*	*Bassia hyssopifolia*	Five-hook bassia
*	*Chenopodium album*	Lamb's quarters
*	*Chenopodium murale*	Nettle-leaved goosefoot
*	*Salsola tragus*	Russian-thistle
Cupressaceae		**Cypress Family**
*	*Juniperus chinensis 'Torulosa'*	Hollywood juniper
Euphorbiaceae		**Spurge Family**
	Croton californicus	California croton
	Eremocarpus setiger	Doveweed
*	*Ricinis communis*	Castor bean
Fabaceae		**Legume Family**
*	*Acacia* sp.	Acacia
	Lupinus succulentus	Arroyo lupine
*	*Medicago polymorpha*	California burclover
*	*Melilotus alba*	White sweetclover
*	*Melilotus indica*	Yellow sweetclover
Geraniaceae		**Geranium Family**
*	*Erodium botrys*	Long-beaked filaree
*	*Erodium cicutarium*	Red-stemmed filaree
*	*Erodium moschatum*	White-stemmed filaree

Juglandaceae		**Walnut Family**
*	*Juglans* sp.	Walnut species
Lamiaceae		**Mint Family**
*	*Marrubium vulgare*	Horehound
Lauraceae		**Laurel Family**
*	*Cinnamomum camphora*	Cinnamon camphor
Lythraceae		**Pomegranate Family**
*	*Lagerstroemia indica*	Crape myrth
Malvaceae		**Mallow Family**
*	*Malva nicaeensis*	Bull mallow
*	*Malva parviflora*	Cheeseweed
Moraceae		**Mulberry Family**
*	*Ficus rubignosa*	Rustyleaf fig
Myoporaceae		**Myoporum Family**
*	*Myoporum laetum*	Myoporum
Myrtaceae		**Myrtle Family**
*	*Eucalyptus globulus*	Blue gum
*	*Eucalyptus* sp.	Gum
*	*Feijoa Sellowiana*	Pineapple guava
*	*Tristania conferta*	Brisbane box
Nyctaginaceae		**Four O'clock Family**
*	*Bougainvillea* sp.	Bougainvillea
Oleaceae		**Olive Family**
	Fraxinus sp.	Ash
*	*Olea europaea*	European olive
Oxalidaceae		**Oxalis Family**
*	*Oxalis pes-caprae*	Bermuda-buttercup
Passifloraceae		**Passion Fruit Family**
*	*Passiflora caerulea*	Passion Flower
Plantaginaceae		**Plantain Family**
*	*Plantago major*	Common plantain
Polygonaceae		**Buckwheat Family**
*	*Rumex crispus*	Curly dock

Salicaceae		**Willow Family**
	Salix gooddingii	Goodding's black willow
Sapindaceae		**Soapberry Family**
*	*Koelreuteria bipinnata*	Chinese flame tree
Simaroubaceae		**Quassia Family**
*	*Ailanthus altissima*	Tree of heaven
Solanaceae		**Nightshade Family**
	Datura wrightii	Jimsonweed
*	*Nicotiana glauca*	Tree tobacco
	Solanum douglasii	Douglas' nightshade
Tamaricaceae		**Tamarisk Family**
*	*Tamarix* sp.	Tamarisk
Tropaeolaceae		**Tropaeolum Family**
*	*Tropaeolum majus*	Nasturtium
Ulmaceae		**Elm Family**
*	*Ulmus parvifolia*	Chinese elm
*	*Ulmus* sp.	Elm species
Urticaceae		**Nettle Family**
	Urtica dioica ssp. *holosericea*	Hoary nettle
Verbenaceae		**Vervain Family**
	Verbena lasiostachys	Western verbena
Violaceae		**Violet Family**
	Viola pedunculata	Johnny jump-ups
Zygophyllaceae		**Caltrop Family**
*	*Tribulus terrestris*	Puncture vine

ANGIOSPERMAE: MONOCOTYLEDONAE — **MONOCOT FLOWERING PLANTS**

Agaveaceae		**Agave Family**
*	*Dracaena draco*	Dragon Tree
Arecaceae		**Palm Family**
*	*Phoenix canariensis*	Canary Island date palm
*	*Washingtonia robusta*	Mexican fan palm

Cyperaceae		**Sedge Family**
	Cyperus involucratus	African umbrella-sedge
Poaceae		**Grass Family**
*	*Avena barbata*	Slender wild oat
*	*Avena fatua*	Common wild oat
*	*Bromus diandrus*	Ripgut grass
*	*Bromus hordeaceus*	Soft chess
*	*Bromus madritensis* ssp. *rubens*	Foxtail chess
*	*Cynodon dactylon*	Bermuda grass
	Distichlis spicata	Saltgrass
*	*Echinochloa crus-galli*	Barnyard grass
	Hordeum jubatum	Foxtail barley
*	*Hordeum murinum* ssp. *leporinum*	Hare barley
*	*Hordeum vulgare*	Cultivated barley
	Leptochloa uninervia	Mexican sprangletop
*	*Lolium multiflorum*	Italian ryegrass
*	*Pennisetum setaceum*	African fountain grass
*	*Piptatherum miliacea*	Smilo grass
*	*Polypogon interruptus*	Ditch polypogon
*	*Polypogon monspeliensis*	Rabbitfoot grass
*	*Schismus barbatus*	Mediterranean grass
*	*Vulpia myuros*	fescue
Typhaceae		**Cat-tail Family**
	Typha domingensis	Southern cat-tail
	Typha latifolia	Broad-leaved cat-tail

Taxonomy and scientific nomenclature conform to Hickman (1993); common names from Abrams (1923, 1944, 1951) and Abrams and Ferris (1960) were used only when species-specific common names were not identified in Roberts (1998).

APPENDIX B

ANIMAL SPECIES OBSERVED

APPENDIX B: ANIMAL SPECIES OBSERVED

This is a list of the butterflies, bony fishes, amphibians, reptiles, birds, and mammals noted in the study area by LSA biologists. Presence may be noted if a species is seen or heard, or identified by the presence of tracks, scat, or other signs.

* Introduced species

LEPIDOPTERA	**BUTTERFLIES**
Papilionidae	**Swallowtails**
Papilio cresphontes	Giant swallowtail
Pieridae	**Whites, Orangetips and Sulphurs**
* *Pieris rapae*	Cabbage butterfly
Pieris sisymbrii sisymbrii	Common white
Nymphalidae	**Brush-footed Butterflies**
Danaus plexippus	Monarch
Agraulis vanillae incarnata	Gulf fritillary
Vanessa atalanta rubria	Red admiral
Vanessa cardui	Painted lady
Vanessa carye anabella	West coast lady
Hesperiidae	**True Skippers**
Hylephila phyleus	Fiery skipper
Lycaenidae	**Metalmarks, Hairstreaks, Coppers and Blues**
Brephidium exilis	Pygmy blue
ODENATA	**DRAGONFLIES**
Coenagrionidae	**Pond damsels**
Forktail sp.	*Ischnura* sp.
Aeshnidae	**Darners**
Common green darner	*Anax junius*
Libellulidae	**Skimmers, Emeralds, Baskettails and Cruisers**
Variegated meadowhawk	*Sympetrum corruptum*
Red saddlebags	*Tramea onustra*

AMPHIBIA	**AMPHIBIANS**
Bufonidae	**True Toads**
Bufo boreas	Western toad
Hylidae	**Treefrogs**
Hyla regilla	Pacific treefrog
REPTILIA	**REPTILES**
Iguanidae	**Iguanid Lizards**
Sceloporus occidentalis	Western fence lizard
Uta stansburiana	Side-blotched lizard
Anguidae	**Alligator Lizards**
Gerrhonotus multicarinatus	Southern alligator lizard
AVES	**BIRDS**
Ardeidae	**Herons**
Ardea herodias	Great blue heron
Nycticorax nycticorax	Black-crowned night-heron
Anatidae	**Swans, Geese and Ducks**
Anas platyrhynchos	Mallard
Accipitridae	**Kites, Hawks, Eagles and Ospreys**
Accipiter striatus	Sharp-shinned hawk
Buteo jamaicensis	Red-tailed hawk
Falconidae	**Falcons**
Falco sparverius	American kestrel
Charadriidae	**Plovers and Lapwings**
Charadrius vociferus	Killdeer
Laridae	**Jaegers, Gulls and Terns**
Larus californicus	California Gull
Larus occidentalis	Western Gull
Columbidae	**Pigeons and Doves**
* *Columba livia*	Rock dove
Zenaida macroura	Mourning dove

Apodidae		**Swifts**
	Aeronautes saxatilis	White-throated swift
Trochilidae		**Hummingbirds**
	Calypte anna	Anna's hummingbird
	Selasphorus rufus	Rufous hummingbird
	Selasphorus sasin	Allen's hummingbird
Picidae		**Woodpeckers**
	Colaptes auratus	Northern flicker
Tyrannidae		**Tyrant Flycatchers**
	Sayornis nigricans	Black phoebe
	Myiarchus cinerascens	Ash-throated flycatcher
Laniidae		**Shrikes**
	Lanius ludovicianus	Loggerhead shrike
Corvidae		**Jays, Magpies and Crows**
	Aphelocoma californica	Western scrub-jay
	Corvus brachyrhynchos	American crow
	Corvus corax	Common raven
Hirundinidae		**Swallows**
	Hirundo rustica	Barn swallow
	Stelgidopteryx serripennis	N. rough-winged swallow
	Petrochelidon pyrrhonota	Cliff swallow
Aegithalidae		**Bushtits**
	Psaltriparus minimus	Bushtit
Troglodytidae		**Wrens**
	Cistothorus palustris	Marsh wren
Regulidae		**Kinglets**
	Regulus calendula	Ruby-crowned kinglet
Sylviidae		**Gnatcatchers and Old World Warblers**
	Polioptila coerula	Blue-gray gnatcatcher
Mimidae		**Mimic Thrushes**
	Mimus polyglottos	Northern mockingbird
Sturnidae		**Starlings**
*	*Sturnus vulgaris*	European starling

Parulidae		**Wood Warblers**
	Vermivora celata	Orange-crowned warbler
	Vermivora ruficapilla	Nashville warbler
	Dendroica coronata	Yellow-rumped warbler
	Geothlypis trichas	Common yellowthroat
Emberizidae		**New World Sparrows**
	Pipilo crissalis	California towhee
	Melospiza lincolnii	Lincoln's sparrow
	Zonotrichia leucophrys	White-crowned sparrow
	Zonotrichia atricapilla	Golden-crowned sparrow
Cardinalidae		**Cardinalid Finches**
	Pheucticus melanocephalus	Black-headed grosbeak
Icteridae		**American Orioles**
	Icterus cucullatus	Hooded oriole
	Sturnella neglecta	Western meadowlark
Fringillidae		**Fringillid Finches**
	Carpodacus mexicanus	House finch
	Carduelis tristis	American goldfinch
Passeridae		**Old World Sparrows**
*	*Passer domesticus*	House sparrow
MAMMALIA		**MAMMALS**
Didelphiidae		**Opossums**
	Didelphis marsupialis	Opossum
Sciuridae		**Squirrels**
	Spermophilus beecheyi	Beechey ground squirrel
Leporidae		**Rabbits and Hares**
	Sylvilagus auduboni	Audubon cottontail
Geomyidae		**Pocket Gophers**
	Thomomys bottae	Botta pocket gopher
Canidae		**Foxes, Wolves, and Allies**
	Canis sp.	Coyote/domestic dog
Mustelidae		**Skunks**
	Mephitus mephitus	Striped skunk

Procyonidae	**Raccoons**
Procyon lotor	Raccoon
Felidae	**Cats**
Felis catus	Feral Cat

Taxonomy and nomenclature follow Mattoni (1990. Butterflies of Greater Los Angeles. Center for Conservation of Biodiversity/Lepidoptera Research Foundation, Los Angeles), Laudenslayer et. al. (1991. A checklist of the amphibians, reptiles, birds, and mammals of California. California Fish and Game 77:109-141), and the American Ornithologists' Union (1998. The A.O.U. Checklist of North American Birds, 7th Ed. American Ornithologists' Union, Washington D.C.).

APPENDIX C

WETLANDS DELINEATION REPORT

LONG BEACH SPORTS PARK PROJECT
LOS ANGELES COUNTY, CALIFORNIA

DELINEATION OF WETLANDS AND JURISDICTIONAL WATERS SUBJECT TO U.S. ARMY CORPS OF ENGINEERS AND CALIFORNIA DEPARTMENT OF FISH AND GAME REGULATORY AUTHORITY

Prepared for:

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LSA Project No. CLB231

LSA

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EXECUTIVE SUMMARY

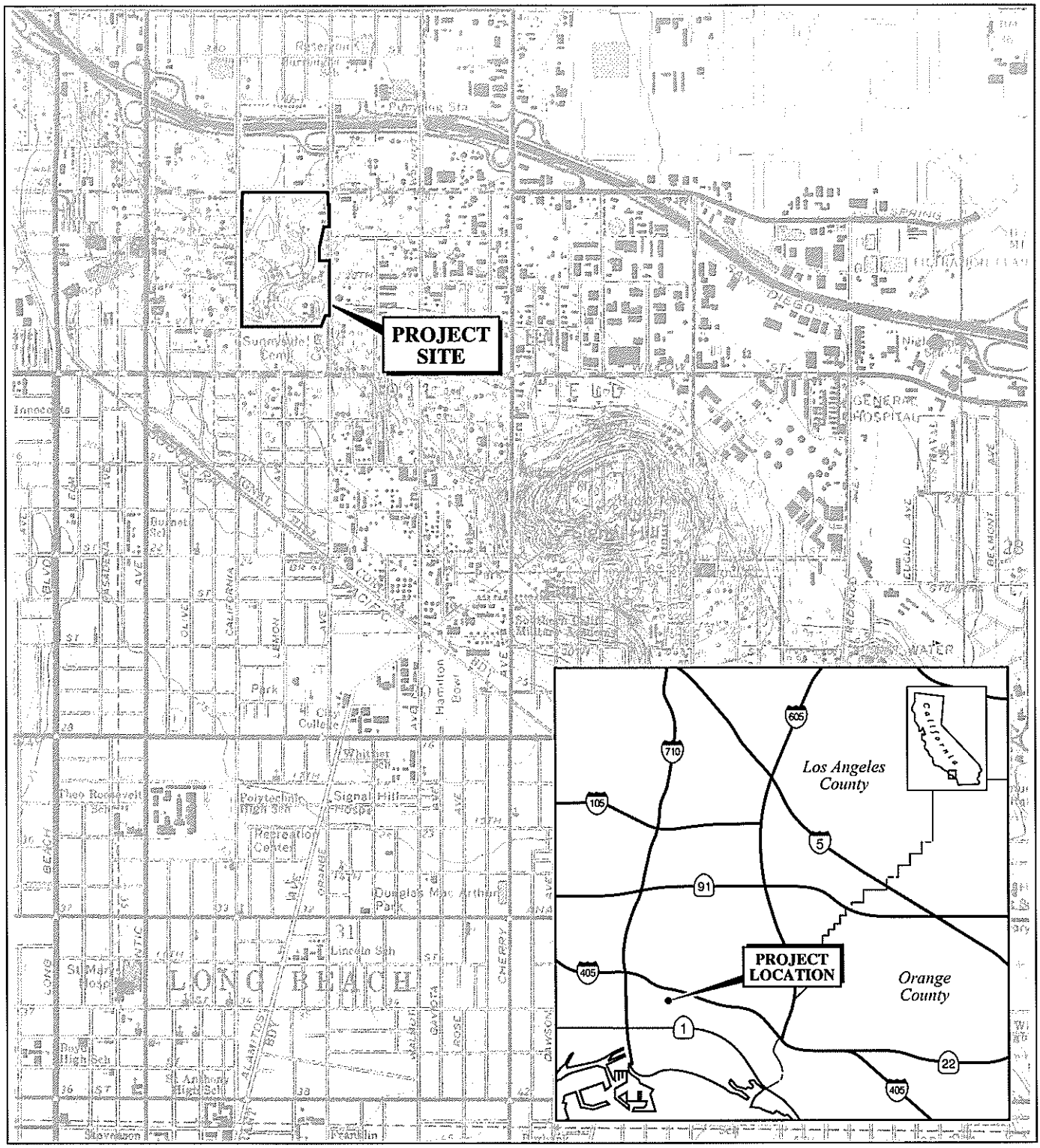
The City of Long Beach (City) is proposing to create a sports park within the parcel located at 1000 East Spring Street, City of Long Beach, Los Angeles County, California. Therefore, the City has retained LSA Associates, Inc. (LSA) to conduct a wetland/jurisdictional delineation as part of the preparation of environmental documentation for the project. The proposed project is located between Spring Street, California Avenue, Orange Avenue and the Sunnyside Cemetery. Specifically, the project area is located in an unsectioned portion of Township 4 South, Range 12 West. The entire project area is depicted on the USGS *Long Beach* 7.5 minute topographic quadrangle (Figure 1).

LSA conducted the wetland/jurisdictional delineation for the project. The on-site examination of vegetation, soils, and hydrology was conducted according to the U.S. Army Corps of Engineers (Corps) three-parameter (vegetation, soils, hydrology) method of wetland delineation (1987 Manual).

The areas examined for the purposes of this jurisdictional delineation included ponding areas in the northern, southwestern and western portions of the project area, and a retention basin near the middle of the project area. (Attachment A, Figures 3 and 3a–3b). Only those areas that contain potentially jurisdictional water bodies are shown. The project area was evaluated by surveying the area on foot and noting and evaluating each potentially jurisdictional feature within the project area.

There is approximately 76 meters (250 linear feet) of concrete-lined channel associated with the retention basin within the project area. The completed jurisdictional delineation revealed that 0.21 hectare (0.50 acre) is likely to be jurisdictional waters of the U.S., of which 0.10 hectare (0.24 acre) meets the Corps definition of nonwetland waters of the U.S., and 0.11 hectare (0.26 acre) meets all three parameters required to qualify as a jurisdictional wetland under Section 404 of the Clean Water Act. Potential California Department of Fish and Game (CDFG) jurisdiction was determined to be equivalent to the area of potential Corps jurisdiction.

The various ponding areas scattered throughout the site are isolated and appear to collect rainfall and runoff from immediately adjacent areas. The shallow ponding areas in the northern and southwestern portions of the project site occur on heavily compacted soils and, for the most part, do not support riparian vegetation. Therefore, these ponding areas would not be subject to either Corps or CDFG jurisdiction. The pond on the western portion of the project site appears to support some riparian vegetation. However, due to the isolation, small size, and relative shallowness of the pond, it would not be subject to Corps or CDFG jurisdiction. This pond amounts to approximately 0.02 hectare (0.05 acre) of nonjurisdictional waters within the project area.



LSA

FIGURE 1

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0 1000 2000

FEET

SOURCE: USGS 7.5" QUAD - LONG BEACH, CA.

Long Beach Sports Park

Project Location

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This report identifies the potential jurisdictional area within the project area and does not analyze the potential impacts from the proposed project.

INTRODUCTION

The following evaluation of regulatory jurisdiction has been prepared by LSA for use by the Corps, the Regional Water Quality Control Board (RWQCB), and the CDFG as part of their review of applications for permit authorization under Sections 404 and 401 of the federal Clean Water Act and for Streambed Alteration Agreement processing under Section 1601 of the California Fish and Game Code, respectively.

LSA was retained by the City to conduct a wetland/jurisdictional delineation for the project. The on-site examination of vegetation, soils, and hydrology was conducted according to the Corps three-parameter (vegetation, soils, hydrology) method of wetland delineation (1987 Manual). Included in the site evaluation was an analysis of current aerial photographs, topographic maps, and soils information, as well as historic aerial photographs and topographic maps. It is anticipated that the entire project area will be impacted for the construction of the sports park.

The elevation of the site ranges from approximately 11 meters (35 feet) in the western portion of the project area to about 43 meters (140 feet) in the southeastern portion of the project area.

The wetland/jurisdictional delineation field evaluation was conducted on March 25 and 26, 2003, by LSA biologists Jim Harrison, Micaele Maddison, and Michael Weller.

REGULATORY BACKGROUND

U.S. Army Corps of Engineers

The Corps regulates discharges of dredged or fill material into *waters of the United States*. These *waters* include *wetlands* and nonwetland bodies of water that meet specific criteria. Corps regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act (CWA) is founded on a connection or *nexus* between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce, or may be indirect, through a nexus identified in the Corps regulations. The following definition of waters of the United States is taken from the discussion provided at 33 CFR 328.3:

> "The term waters of the United States means:
>
> (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce . . . ;
>
> (2) All interstate waters including interstate wetlands;
>
> (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) . . . the use, degradation or destruction of which could affect interstate or foreign commerce . . . ;
>
> (4) All impoundments of waters otherwise defined as waters of the United States under the definition; and

(5) Tributaries of waters defined in paragraphs (a) (1)–(4) of this section."

In the past, an indirect nexus could potentially be established if isolated waters provided habitat for migratory birds, even in the absence of a surface connection to a navigable water of the United States. The 1984 rule that enabled the Corps to expand jurisdiction over isolated waters of this type became known as the Migratory Bird Rule.

On January 9, 2001, the United States Supreme Court narrowly limited the Corps jurisdiction of "non-navigable, isolated, intrastate" waters based solely on the use of such waters by migratory birds. The Court's ruling derives from the case Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers, No. 99-1178 (January 9, 2001) (SWANCC). The Supreme Court, in a 5–4 decision, determined that the Corps exceeded its statutory authority by asserting CWA jurisdiction over an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds.

The Corps typically regulates as *waters of the United States* any body of water displaying an *ordinary high water mark* (OHWM). Corps jurisdiction over nontidal waters of the United States extends laterally to the OHWM or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM 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 the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 328.3). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

The Corps and the Environmental Protection Agency (EPA) define wetlands as follows:

> "Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions."

In order to be considered a *jurisdictional wetland* under Section 404, an area must possess three wetland characteristics: hydrophytic *vegetation*, hydric *soils*, and wetland *hydrology*. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters may be analyzed to determine whether the criteria are satisfied.

Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) is considered hydrophytic. Hydrophytic species are those included on the *National List of Plant Species That Occur in Wetlands* (Reed 1988), published by the U.S. Fish and Wildlife Service (USFWS). Each species on the list is rated according to a wetland indicator category, as shown in Table A.

To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW, or FAC.

Table A: Hydrophytic Vegetation

Category		Probability
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability > 99%)
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability 67% to 99%)
Facultative	FAC	Equally likely to occur in wetlands and nonwetlands (estimated probability 34% to 66%)
Facultative Upland	FACU	Usually occur in nonwetlands (estimated probability 67% to 99%)
Obligate Upland	UPL	Almost always occur in nonwetlands (estimated probability > 99%)

The delineation of hydrophytic vegetation is typically based on the three (five, if only one or two strata are present) most dominant species from each vegetative stratum (strata are considered separately); when more than 50 percent of these dominant species are hydrophytic (i.e., FAC, FACW, or OBL), the vegetation is considered hydrophytic.

Hydric soils are saturated or inundated long enough during the growing season to develop anaerobic conditions that favor growth and regeneration of hydrophytic vegetation. Soils are considered hydric when the National Technical Committee for Hydric Soils (NTCHS) criteria are met. Current criteria (as of October 1992) are as follows:

1. All Histosols except Folists; or
2. Soils in Aquic suborders, Aquic subgroups, Albolls suborder, Salothids great group, Pell great groups of vertisols, Pachic subgroups, or Cumulic subgroups that are:
   A) Somewhat poorly drained and have a frequently[1] occurring water table at less than 6 inches from the surface for a significant period (usually more than two weeks) during the growing season; or
   B) Poorly drained or very poorly drained and have either:
      (1) A frequently occurring water table at less than 6 inches from the surface for a significant period (usually more than two weeks) during the growing season if textures are coarse sand, or fine sand in all layers within 20 inches; or
      (2) A frequently occurring water table at less than 12 inches from the surface for a significant period (usually more than two weeks) during the growing season if permeability is greater than 6.0 inches/hour in all layers within 20 inches of the surface; or

[1] The term “frequent” is defined by the NTCHS as more than 50 years out of 100 or more than 50 percent probability in any 1 year.

(3) A frequently occurring water table at less than 18 inches from the surface for a significant period (usually more than two weeks) during the growing season if permeability is less than 6.0 inches/hour in all layers within 20 inches of the surface; or

3. Soils that are frequently ponded for long duration or very long duration[1] during the growing season; or
4. Soils that are frequently flooded for long duration or very long duration during the growing season.

A number of indirect indicators may signify the presence of hydric soils, including hydrogen sulfide generation, the presence of iron and manganese concretions, certain soil colors, gleying, and the presence of mottling. Generally, hydric soils are dark in color or may be gleyed (bluish, greenish, or grayish), resulting from soil development under anoxic (without oxygen) conditions. Bright mottles within an otherwise dark soil matrix indicate periodic saturation with intervening periods of soil aeration.

Hydric indicators are particularly difficult to observe in sandy soils, which are often recently deposited soils of flood plains (entisols) and usually lack sufficient fines (clay and silt) and organic material to allow use of soil color as a reliable indicator of hydric conditions. Hydric soil indicators in sandy soils include accumulations of organic matter in the surface horizon, vertical streaking of subsurface horizons by organic matter, and organic pans. In some situations, it may be impossible to find any hydric soil indicators due to recent deposits of sandy materials (e.g., accreting sandbars). These are described as "Atypical Situations" in the 1987 Manual, which prescribes use of the other two parameters (vegetation and hydrology) for wetland delineations when no hydric soils indicators can be found.

Under natural conditions, development of hydrophytic vegetation and hydric soils is dependent on a third characteristic: wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (Environmental Laboratory 1987). The wetland hydrology parameter is satisfied if the area is seasonally inundated or saturated to the surface for a consecutive number of days equal to 12.5 percent or more of the growing season[2] (Corps 1992). Areas saturated to the surface for less than 5 percent of the growing season do not meet the hydrology criterion. Areas saturated to the surface between 5.0 and 12.5 percent of the growing season may or may not meet the hydrology criterion. In these situations, other hydrology indicators must be considered, and the vegetation test should be critically reviewed (Corps 1991).

Hydrology is often the most difficult criterion to measure in the field, due to seasonal and annual variations in water availability. Some of the indicators that are commonly used to identify wetland

[1] Long duration is defined by the NTCHS as a single event ranging from 7 to 30 days; very long duration is defined as a single event that lasts longer than 30 days.

[2] The growing season is defined as that portion of the year when the soil temperature at 50.04 centimeters (19.7 inches) below the ground surface is greater than biologic zero (5°C [41°F]) (USDA Soil Survey Staff 1975); this can be estimated from regional climatological data such as that provided in County soil surveys.

hydrology include visual observation of inundation or saturation, watermarks, recent sediment deposits, surface scour, and oxidized root channels (rhizospheres) resulting from prolonged anaerobic conditions.

Wetland delineations for section 404 permitting purposes must be done according to the 1987 Manual (Environmental Laboratory 1987). This manual provides two different approaches to delineating wetlands (i.e., routine and comprehensive), depending on the complexity of the site and whether there is a need for quantitative evaluation and extensive documentation. For the majority of wetland delineations, the routine on-site evaluation method is appropriate.

Determination of wetland limits may be obfuscated by a variety of natural environmental factors, including cyclic periods of drought and flooding or highly ephemeral stream systems. During periods of drought, bank return flows are reduced, and water tables may be lowered. This results in a corresponding lowering of ordinary high water and invasion of upland plant species into wetland areas. Conversely, extreme flooding may create physical evidence of high water well above what might be considered ordinary and may allow temporary invasion of hydrophytic species into nonwetland areas. In highly ephemeral systems, typical of Southern California, these problems are encountered frequently. In these situations, professional judgement and knowledge of local ecological conditions come into play in delineating wetlands.

California Department of Fish and Game

The CDFG, through provisions of the California Fish and Game Code (Sections 1601–1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water.

CDFG regulates wetland areas only to the extent that those wetlands are a part of a river, stream, or lake as defined by CDFG. While some seasonal ponds may be considered wetlands by CDFG, if they are not associated with a river, stream, or lake, they are not subject to jurisdiction of CDFG under Sections 1601–1603 of the Fish and Game Code.

Although the CDFG does not have a formal definition of a lake noted in its guidelines, a lacustrine system (lake) is defined by the U.S. Fish and Wildlife Service (Cowardin et al., 1979) as all wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent aerial coverage; and (3) total area exceeds 8 hectares (20 acres). Similar wetland and deepwater habitats totaling less than 8 hectares are also classified in the lacustrine system if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 2 meters (6.6 feet) at low water. Recent verbal guidance from the CDFG to determine if the ponding areas on site would satisfy the CDFG definition of a lake indicates that the ponding areas should be in the context of other water bodies that are considered lakes in the geographic region (Don Chadwick, personal communication). Therefore, on a more anecdotal basis, the smallest body of water in the region that is generally called a lake, that LSA is aware of, is Laguna Lake No. 2 in Orange County, which is 1.30 hectares (3.2 acres).

METHODS

A routine wetland delineation was conducted, and areas of potential jurisdiction were evaluated according to the Corps 1987 Manual (i.e., Environmental Laboratory 1987) and CDFG guidelines. The project area was surveyed on foot for both potential wetlands and nonwetland jurisdictional waters, as well as streambed and riparian resources. General site characteristics were also noted.

Portions of the project area that contained potentially jurisdictional waters included the retention basin and associated drainage near the middle of the project area, as well as three ponding areas scattered throughout the site. One ponding area was located in the northern end of the site, another in the southwestern portion of the site, and a third in the western portion of the site (Attachment A, Figures 3, 3a, and 3b).

Measurements of jurisdictional areas were taken in the field and mapped on a topographic base (scale: 3/4 inch = 50 feet). The jurisdictional area for the project was calculated using Geographic Information Systems (GIS) software and by multiplying the average width of drainage by the length.

All areas within the project area supporting species of plant life potentially indicative of wetlands were evaluated according to routine wetland delineation procedures described in the 1987 Manual. Standard data forms were completed for each sample plot; transcriptions of these data forms are included in Attachment B of this report. At each sample plot, the dominant and subdominant plant species were identified, and their wetland indicator (Reed 1988) status was noted. Soil characteristics were assessed by digging a soil pit and examining the various profiles to determine the presence or absence of hydric indicators. Finally, hydrologic conditions, including any surface inundation, saturated soils, groundwater levels, and/or other wetland hydrology indicators, were noted. All water bodies were examined for evidence of an OHWM, which defines the lateral limit of the Corps jurisdictional boundaries unless adjacent wetlands are determined to be present.

RESULTS AND DISCUSSION

Review of available historic engineering documentation indicates that both the retention basin and the associated drainage near the central portion of the site are associated with a former natural drainage course. Initially, prior to 1921, a water reservoir was constructed at the current location of the existing retention basin. The topographic contours indicate that the structure would have impounded surface drainage to the north, along the upstream portion of the previously existing drainage course. Small local marsh areas and stands of willow trees are noted on the 1921 map in the upstream area. The interior of the reservoir was likely lined with an impervious material similar to the concrete lining of the existing retention basin. A small dam or wall is apparent on the 1925 USGS topographic map, or it may indicate that the structure was constructed during the time the map was being prepared. A covered reservoir is clearly visible in the 1927 and 1928 aerial photographs. On the next available historic aerial photograph (1945), the basin is no longer covered and appears to have been converted to a stormwater detention basin. Subsequent to preparation of the 1968 USGS topographic map, significant quantities of imported fill appear to have been placed within the natural drainage course north of the detention basin. Therefore, the retention basin and associated drainage would be subject to both Corps and CDFG jurisdiction.

The shallow ponding areas in the northern and southwestern portions of the project site occur on heavily compacted soils and for the most part do not support riparian vegetation. Furthermore, these areas are

isolated from other potentially jurisdictional waters. Therefore, these ponding areas would not be subject to either Corps or CDFG jurisdiction. The pond on the western portion of the project site appears to support some riparian vegetation. However, due to the isolation, small size and relative shallowness of the pond, it would not be subject to Corps or CDFG jurisdiction.

Vegetation. The vegetation associated with the ponding area in the northern portion of the site is dominated by five-hook bassia (*Bassia hyssopifolia)* and Italian ryegrass (*Lolium multiflorum).* Although the dominant species are considered hydrophytic, they are weak indicators of potential wetlands as they are equally likely to occur in wetlands and nonwetlands. Another species that occurs between the waste rock piles on the margins of the ponding area is rabbitfoot grass (*Polypogon monspeliensis)*. This species typically occurs in wetlands.

The vegetation associated with the ponding area in the southwestern portion of the site is dominated by Italian ryegrass. The subdominant plant species in this area are mulefat (*Baccharis salicifolia)* and five-hook bassia. Although mulefat is known to occur on steep slopes and in other upland settings, it more frequently occurs in wetlands. However, most of the mulefat in this area are small seedlings, which is probably an occurrence to be attributed to this year's relatively high rainfall.

The ponding area in the western portion of the site is dominated by mulefat. The subdominant species at this location is Goodding's black willow (*Salix gooddingii)*. Both of these species are strong indicators of wetlands, as they are usually associated with wetlands.

There is cat-tail marsh vegetation growing on the sediment deposits within the concrete-lined drainage course and in the associated retention basin. The dominant species is broad-leaved cattail (*Typha latifolia*). Other species that occur in these sediment deposits are Goodding's black willow and African umbrella-sedge *(Cyperus alternifolius)*. All of these species are strong indicators of wetlands.

Soils. The property occurs within the Los Angeles coastal plain, which is underlain by a thick succession of sedimentary rocks and unconsolidated sediments. Unconsolidated to semiconsolidated deposits of Pleistocene age have been uplifted along the structural/fault zone, extending to depths in the order of 200 to 500 feet beneath the ground surface at the project site. These deposits consist of interfingered layers and lenses of sand, silt, gravel and minor clay, which are believed to be fluvial and/or near-shore marine in origin. A thin mantle of Recent or Holocene age native deposits (i.e, deposited less that 11, 000 years ago) is also present covering the older, uplifted sediments in some areas. These deposits are typically less than 5 to 10 feet in thickness and occur as a thin mantle of slopewash/colluvium on the slopes or possibly as shallow alluvium in the previously existing drainage course that crosses the central portion of the site. Significant quantities of imported fills appear to have been deposited in several areas of the project site. These fills appear to have variable amounts of inert debris (i.e. concrete, bricks, asphalt) and in some cases minor amounts of organic debris or trash mixed with the soil.

At sample plot 1, adjacent to the ponding area in the northern portion of the site, it was not possible to excavate a soil pit due to the asphalt ground cover and heavily compacted silt deposits. A soil pit was excavated at sample plot 2, adjacent to the ponding area on the southwestern portion of the site, and

the soil was a mixture of silty clay with deposits of asphalt present in the soil. A soil pit was not excavated at sample plot 3, adjacent to the ponding area on the western portion of the project area, due to the aquic moisture regime present at the time of the site visit. At sample plot 4, the retention basin and associated drainage, it was not possible to excavate a soil pit due to the concrete lining of the retention basin and drainage. The soils, which supported hydrophytic vegetation, were sediment deposits on the surface of the concrete lining, and an aquic moisture regime was present both in the retention basin and the drainage at the time of the site visit.

Hydrology. The retention basin and associated drainage showed evidence of wetland hydrologic indicators, with drift lines and water stains on the concrete banks being most common. The annual growing season in this part of Orange County is estimated at 365 days. Assuming an average growing season of 365 days, soils would need to be saturated to the surface for a minimum of 5 percent of the growing season, or about 18 days, in order to satisfy the wetland hydrology criterion. A definitive determination would require saturation for 12.5 percent of the growing season, or about 45 days. As described earlier in this report, surface water was present during the on-site assessment in all of the ponding areas. However, the on-site assessments were conducted approximately one week after a heavy rainfall. The ponding areas on the northern and southwestern portions of the property were very shallow and would not be expected to experience saturation for the 12.5 percent of the growing season. The ponding area on the western portion of the property appeared to be several feet deep. It is possible in years of heavy rainfall, such as this year, that the amount of water retained in the ponding area from runoff from the adjacent slopes may meet the minimum daily requirement of surface saturation. However, this would not be an annual occurrence as it would be directly related to the annual rainfall. In addition, the "shore" of this ponding area is sandy clay and appears to have been constructed by on-site grading and fill deposits. The concrete retention basin and associated drainage would most likely have annual saturation in excess of the 45 days as runoff from upstream and adjacent uses appears to be a perennial water source in the area.

Jurisdictional Status of Drainages/Structures

The concrete drainage and associated retention basin are shown on historical photos and topography and are most likely jurisdictional. The concrete drainage has an OHWM of 14 feet at the inlet and 6 feet at the outlet. The extent of the cattail marsh is confined to the OHWM in the concrete drainage and therefore would be considered the extent of the Corps jurisdiction within the drainage. The islands of cattail marsh within the retention basin that would be considered wetland waters of the U.S. and, as such, would be subject to Corps jurisdiction. In addition, there was open water within the retention basin, this would be considered nonwetland waters of the U.S. due to the lack of hydrophytic vegetation (Figure 4). All of the other ponding areas within the project area are isolated, which means there is no surface connection to a navigable water of the U.S. Therefore, in conformance with the recent ruling of the United States Supreme Court, which limited the Corps jurisdiction of "non-navigable, isolated, intrastate" waters, none of these ponding areas would be subject to Corps jurisdiction. The jurisdictional acreages are summarized in Table B.

Table B: Jurisdictional Waters of the U.S.

Jurisdictional Area	Area Hectares (Acres)
Jurisdictional Waters	0.21 (0.50)
Nonwetland waters	0.10 (0.24)
Wetland	0.11 (0.26)

The jurisdictional status of drainages similar to those described above are normally determined on a case-by-case basis by the regulatory agencies. LSA recommends that the agencies be consulted during an on-site meeting with the Corps and CDFG for a final determination regarding the drainage ,structures and ponding areas and to verify the results of LSA's jurisdictional determination.

California Department of Fish and Game

The potential CDFG jurisdiction was determined to be equivalent to the potential Corps jurisdiction. The jurisdictional areas are summarized in Table C.

As noted previously, the CDFG, is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks and at least an intermittent flow of water. Although the CDFG does not have a formal definition of a lake noted in its guidelines, a lake is defined by the U.S. Fish and Wildlife Service as all wetlands and deepwater habitats with all of the following characteristics: (1) situated in a topographic depression or a dammed river channel; (2) lacking trees, shrubs, persistent emergents, emergent mosses or lichens with greater than 30 percent aerial coverage; and (3) total area exceeds 8 hectares (20 acres). Similar wetland and deepwater habitats totaling less than 8 hectares are also classified in the lacustrine system if an active wave-formed or bedrock shoreline feature makes up all or part of the boundary, or if the water depth in the deepest part of the basin exceeds 2 meters (6.6 feet) at low water.

Recent verbal guidance from the CDFG to determine if the ponding areas on site would satisfy the CDFG definition of a lake indicates that the ponding areas should be compared to the geographically closest lake in the region (Senior Environmental Scientist Don Chadwick, personal communication, April 17, 2003). Therefore, on a more anecdotal basis, the smallest body of water in the region generally called a lake, that LSA is aware of, is Laguna Lake No. 2. This lake, which is approximately 1.30 hectares (3.2 acres) is associated with a drainage which runs in a northeasterly to southwesterly direction in Laguna Canyon. The vast difference in size and hydrology between the smallest Laguna Lake and the ponding areas within the project area indicates that the ponding areas would not meet either the local definition of a lake or the USFWS definition of a lake. While some seasonal ponds may be considered wetlands by the CDFG if they are not associated with a river, stream, or lake, they are not subject to jurisdiction of CDFG under Sections 1601–1603 of the Fish and Game Code. Therefore, none of the seasonal ponds within the project area would be subject to CDFG jurisdiction.

Potential CDFG jurisdiction encompasses 0.21 hectare (0.50 acre).

Table C: Potential Jurisdictional Areas—CDFG

Jurisdictional Area	Area Hectares (Acres)
Jurisdictional Waters	0.21 (0.50)
Drainages Channel	0.12 (0.31)

The results summarized above in Tables B and C represent the potential jurisdictional area currently within the study. They do not represent the potential impacts from the proposed project.

CONCLUSIONS

Based on the analysis, LSA found a total of 0.21 hectare (0.50 acre) of jurisdictional waters of the United States, of which 0.11 hectare (0.26 acre) is jurisdictional wetlands and 0.10 hectare (0.24 acre) is jurisdictional nonwetland waters of the United States Potential CDFG jurisdiction was determined to be equivalent to the potential Corps jurisdiction.

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ATTACHMENT A

AERIAL PHOTOGRAPHS AND COLOR PHOTOGRAPHS OF THE PROJECT AREA

LSA

Legend

Project Limits

Habitat Type

- Cattail / Marsh
- Mulefat Scrub
- Developed
- Open Water
- Ornamental
- Ruderal
- Ruderal / Annual Grassland

N

0 150 300

FEET

SOURCE: Eagle Aerial, 2002.

I:\clb231\gis\clb231-bio_habitat.mxd (10/6/03)

FIGURE 2

Long Beach Sports Park
Habitat Map

LSA

Legend

Project Limits
Photo Location
Sample Location

Habitat Type (with Acreage)
Cattail / Marsh
Mulefat Scrub
Open Water

N

0 150 300
FEET

SOURCE: Eagle Aerial, 2002.

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FIGURE 3

Long Beach Sports Park
Jurisdictional Areas

View to the west of ponding area, sample plot 1.

View to the southwest of ponding area, sample plot 2.

LSA

FIGURE 3A

Long Beach Sports Park
Project Site Photos

I:\CLB231\G\Photos 1&2.cdr (4/3/03)

View to the southeast of isolated ponding area, sample plot 3.

View to the southeast across existing retention basin.

LSA

FIGURE 3B

Long Beach Sports Park
Project Site Photos

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ATTACHMENT B

DATA SHEETS

LSA

DATA FORM 1
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation)

Project/Site:	Long Beach Sports Park	Date:	March 25, 2002
Applicant/Owner:		County:	Los Angeles
Delineator(s):	M. Maddison & J Harrison	State:	California
Do Normal Circumstances exist? (if No, explain in final Remarks)		Plant Community:	developed
Does an Atypical Situation exist? (if Yes, explain in final Remarks)		Transect No.:	
Is this a Problem Area? (if Yes, explain in final Remarks)	4	Plot No.:	SP1

VEGETATION

Dominant Plant Species	Stratum	Indicator	Subdominant Plant Species	Stratum	Indicator
Bassia hyssopifolia		Fac	Polypogon monspeliensis		FacW
Lolium multiflorum		Fac			

Percent of Dominant Species that are OBL, FACW or FAC (Excluding FAC-): 100%

Remarks: weak indicators

HYDROLOGY

Recorded Data (describe in Remarks)

_____ Stream, Lake or Tide Gage

_____ Aerial Photographs

_____ Other

_____ No Recorded Data Available

Wetland Hydrology Indicators:

Primary Indicators:

✓ Inundated

_____ Saturated in Upper 12 Inches

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: _____

Depth to Free Water in Pit: _____

Depth to Saturated Soil: _____

Secondary Indicators (2 or more required):

_____ Oxidized Root Channels in Upper 12 Inches

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (explain in Remarks)

Remarks: cannot dig soil pit — asphalt ground cover + compacted silt. shallow

WETLAND DATA FORM
(Continued)

SOILS

Name (Series/Phase): _____ Drainage Class: _____

Taxonomy (Subgroup): _____ Field Observations Confirmed Mapped Type? _____

Profile Descriptions:

Depth	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

_____ Histosol

_____ Histic Epipedon

_____ Sulfidic Odor

_____ Aquic Moisture Regime

_____ Reducing Conditions

_____ Gleyed or Low-Chroma Soils

_____ Concretions

_____ High Organics in Surface Layer (Sandy Soils)

_____ Organic Streaking (Sandy Soils)

_____ Listed on Local Hydric Soils List

_____ Listed on National Hydric Soil List

_____ Other (explain in Remarks)

Remarks: heavily compacted soils - cannot excavate soil pit

WETLAND DETERMINATION

Hydrophytic Vegetation Present? _____

Wetland Hydrology Present? _____

Hydric Soils Present? _____

Is This Sampling Point Within a Wetland? _____

Remarks: Isolated from other waters, ponding appears to be due to asphalt layer in substrate impermeable

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DATA FORM 1
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation)

Project/Site: Long Beach Sports Park	Date: March 25, 2003
Applicant/Owner:	County: Los Angeles
Delineator(s): M. Maddison & J. Harrison	State: California
Do Normal Circumstances exist? (if No, explain in final Remarks)	Plant Community: Ruderal/AG
Does an Atypical Situation exist? (if Yes, explain in final Remarks)	Transect No.:
Is this a Problem Area? (if Yes, explain in final Remarks)	Plot No.: SP2

VEGETATION

Dominant Plant Species	Stratum	Indicator	Subdominant Plant Species	Stratum	Indicator
Lolium multiflorum		FAC	mulefat		FACW
			Baccharis hyssopifolia		FAC

Percent of Dominant Species that are OBL, FACW or FAC (Excluding FAC-): 100

Remarks: weak indicator

HYDROLOGY

Recorded Data (describe in Remarks)

_____ Stream, Lake or Tide Gage

_____ Aerial Photographs

_____ Other

_____ No Recorded Data Available

Wetland Hydrology Indicators:

Primary Indicators:

✓ Inundated

_____ Saturated in Upper 12 Inches

_____ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: _____

Depth to Free Water in Pit: _____

Depth to Saturated Soil: _____

Secondary Indicators (2 or more required):

_____ Oxidized Root Channels in Upper 12 Inches

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (explain in Remarks)

Remarks: very shallow

WETLAND DATA FORM
(Continued)

SOILS

Name (Series/Phase): _____ Drainage Class: _____

Taxonomy (Subgroup): _____ Field Observations Confirmed Mapped Type? _____

Profile Descriptions:

Depth	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

_____ Histosol

_____ Histic Epipedon

_____ Sulfidic Odor

_____ Aquic Moisture Regime

_____ Reducing Conditions

_____ Gleyed or Low-Chroma Soils

_____ Concretions

_____ High Organics in Surface Layer (Sandy Soils)

_____ Organic Streaking (Sandy Soils)

_____ Listed on Local Hydric Soils List

_____ Listed on National Hydric Soil List

_____ Other (explain in Remarks)

Remarks: Compacted soils ; silty-clay w/deposits of asphalt

WETLAND DETERMINATION

Hydrophytic Vegetation Present? _____

Wetland Hydrology Present? _____

Hydric Soils Present? _____

Is This Sampling Point Within a Wetland? _____

Remarks: Isolated – no federal nexus - ponding appears to be from impermeable layer in substrate (Compacted silty-clay w/asphalt).

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DATA FORM 1
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation)

$26

Project/Site: Long Beach Sports Park	Date: March 25, 2003
Applicant/Owner:	County:
Delineator(s): M. Maddison & J. Harrison & M. Weller	State:
Do Normal Circumstances exist? (if No, explain in final Remarks)	Plant Community:
Does an Atypical Situation exist? (if Yes, explain in final Remarks)	Transect No.:
Is this a Problem Area? (if Yes, explain in final Remarks)	Plot No.: SP3

VEGETATION

Dominant Plant Species	Stratum	Indicator	Subdominant Plant Species	Stratum	Indicator
mulefat		FacW	Salix Goodingii		obl

Percent of Dominant Species that are OBL, FACW or FAC (Excluding FAC-): 100%

Remarks:

HYDROLOGY

_____ Recorded Data (describe in Remarks)

_____ Stream, Lake or Tide Gage

_____ Aerial Photographs

_____ Other

_____ No Recorded Data Available

Wetland Hydrology Indicators:

Primary Indicators:

✓ Inundated

_____ Saturated in Upper 12 Inches

✓ Water Marks

_____ Drift Lines

_____ Sediment Deposits

_____ Drainage Patterns in Wetlands

Field Observations:

Depth of Surface Water: _____

Depth to Free Water in Pit: _____

Depth to Saturated Soil: _____

Secondary Indicators (2 or more required):

_____ Oxidized Root Channels in Upper 12 Inches

_____ Water-Stained Leaves

_____ Local Soil Survey Data

_____ FAC-Neutral Test

_____ Other (explain in Remarks)

Remarks: standing water in pond w/ water marks around tree trunks.

WETLAND DATA FORM
(Continued)

SOILS

Name (Series/Phase): _____ Drainage Class: _____

Taxonomy (Subgroup): _____ Field Observations Confirmed Mapped Type? _____

Profile Descriptions:

Depth	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

_____	Histosol	_____	Concretions
_____	Histic Epipedon	_____	High Organics in Surface Layer (Sandy Soils)
_____	Sulfidic Odor	_____	Organic Streaking (Sandy Soils)
✓	Aquic Moisture Regime	_____	Listed on Local Hydric Soils List
_____	Reducing Conditions	_____	Listed on National Hydric Soil List
_____	Gleyed or Low-Chroma Soils	_____	Other (explain in Remarks)

Remarks: no soil pit required - standing water in 'pond'

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Y	Is This Sampling Point Within a Wetland?	Y?
Wetland Hydrology Present?	Y		
Hydric Soils Present?	Y		

Remarks: Isolated - no federal nexus.

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DATA FORM 1
ROUTINE WETLAND DETERMINATION
(1987 ACOE Wetland Delineation)

#26

Project/Site: Long Beach Sports Park	Date: March 25, 2003
Applicant/Owner:	County:
Delineator(s): M. Maddison + J. Harrison & M. Weller	State:
Do Normal Circumstances exist? (if No, explain in final Remarks)	Plant Community:
Does an Atypical Situation exist? (if Yes, explain in final Remarks)	Transect No.:
Is this a Problem Area? (if Yes, explain in final Remarks)	Plot No.: SP 4

VEGETATION

Dominant Plant Species	Stratum	Indicator	Subdominant Plant Species	Stratum	Indicator
Typha latifolia		obl	Salix goodingii		obl
			Cyperus alternifolius		obl

Percent of Dominant Species that are OBL, FACW or FAC (Excluding FAC-): 100%

Remarks:

HYDROLOGY

Recorded Data (describe in Remarks)

- ____ Stream, Lake or Tide Gage
- ____ Aerial Photographs
- ____ Other
- ____ No Recorded Data Available

Wetland Hydrology Indicators:

Primary Indicators:

- ✓ Inundated
- ____ Saturated in Upper 12 Inches
- ✓ Water Marks
- ✓ Drift Lines
- ____ Sediment Deposits
- ____ Drainage Patterns in Wetlands

Field Observations:

- Depth of Surface Water: ____
- Depth to Free Water in Pit: ____
- Depth to Saturated Soil: ____

Secondary Indicators (2 or more required):

- ____ Oxidized Root Channels in Upper 12 Inches
- ____ Water-Stained Leaves
- ____ Local Soil Survey Data
- ____ FAC-Neutral Test
- ____ Other (explain in Remarks)

Remarks: no soil pit dug due to concrete lining.

WETLAND DATA FORM
(Continued)

SOILS

Name (Series/Phase): _____ Drainage Class: _____

Taxonomy (Subgroup): _____ Field Observations Confirmed Mapped Type? _____

Profile Descriptions:

Depth	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/ Contrast	Texture, Concretions, Structure, etc.

Hydric Soil Indicators:

_____	Histosol	_____	Concretions
_____	Histic Epipedon	_____	High Organics in Surface Layer (Sandy Soils)
_____	Sulfidic Odor	_____	Organic Streaking (Sandy Soils)
✓	Aquic Moisture Regime	_____	Listed on Local Hydric Soils List
_____	Reducing Conditions	_____	Listed on National Hydric Soil List
_____	Gleyed or Low-Chroma Soils		Other (explain in Remarks)

Remarks: cannot dig soil pit, soils are deposits on concrete

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Y	Is This Sampling Point Within a Wetland?	Y
Wetland Hydrology Present?	Y		
Hydric Soils Present?	Y		

Remarks: