Appendix B

Biological Evaluation Report

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TO: **Phyllis Potter, Circle Point**
FROM: **Josh Phillips, Principal Biologist**
DATE: **April 17, 2009**
SUBJECT: **Central Estuary Waterfront Specific Plan Area – Biological Evaluation Report**

INTRODUCTION

Pacific Biology was contracted by Circle Point to conduct a biological evaluation of the Central Estuary Waterfront Specific Plan Area (Study Area). The focus of the biological evaluation was to generally describe the biological resources present, identify areas containing sensitive biological resources that should be considered in development of the Specific Plan, and to identify anticipated biological permit requirements. The Study Area is located in Oakland, California. As shown in **Figure 1**, the Study Area generally encompasses the area from 19th Avenue to the north, 50th Avenue to the south, Interstate-880 to the east and the Bay to the west.

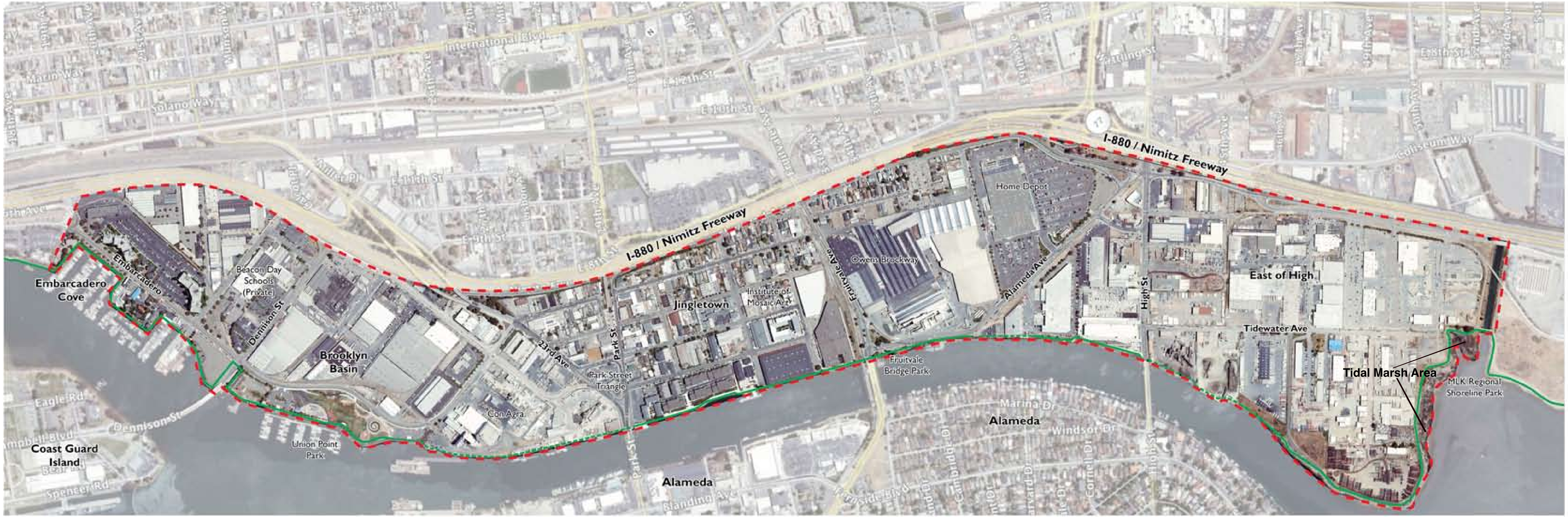
METHODOLOGY

Database Review

The latest version of the California Natural Diversity Data Base (CNDDB 2009) was reviewed for the Study Area and a surrounding five-mile area. The intent of the database review was to identify all documented occurrences of special-status plant and wildlife species in the project area and to determine their locations relative to the Study Area.

Reconnaissance-Level Field Survey

Pacific Biology conducted reconnaissance-level surveys of the Study Area on April 2 and 16, 2009. The surveys included a "windshield survey" (i.e., driving through) of the Study Area, and walking representative portions of the remaining undeveloped land in the Study Area. Any existing native or naturalized habitats and plant communities present were generally characterized, and a preliminary evaluation of the potential of special-status plant and wildlife species and other sensitive biological resources (e.g., jurisdictional wetlands) to occur was conducted.



Central Estuary Waterfront Specific Plan Area

FIGURE 1: STUDY AREA

- Plan Area Boundary
- Bay Trail (Existing)
- Bay Trail (Proposed Long-term Alignment)

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GENERAL BIOLOGICAL CONDITIONS

The Study Area is almost entirely developed and areas containing native or naturalized habitat are largely restricted to Martin Luther King (MLK) Regional Shoreline Park and to rocky and rip-rap shoreline areas.

MLK Regional Shoreline Park is partially located within the southern portion of the Study Area (Figure 1). The Park includes a linear earthen estuarine channel and other shoreline areas. The upper banks of the channel and other upland portions of the Park in the Study Area are characterized by non-native grasses and ruderal (*i.e.,* weedy) plant species characteristic of disturbed areas. The dominant upland plant species identifiable at the time of the field visit included the non-native grasses wild oat (*Avena* sp.) and foxtail barley (*Hordeum jubatum*), as well as mustard (*Brassica* sp.), wild radish (*Raphanus raphanistrum*), and fennel (*Foeniculum vulgare)*. The portion of the Park to the south of channel (which is outside of the Study Area) is dominated by coyote brush (*Baccharis pilularis*) and other upland plant species. There are no woodland habitats present, but several moderate sized trees are present in and bordering the Park.

The vegetation along the lower elevation portions of the creek banks and shoreline areas transitions to a matrix of pickleweed (*Sarcocornia pacifica*), saltgrass (*Distichlis spicata*), and marsh gumplant (*Grindelia stricta* var. *angustifolia*). A moderate-sized tidal marsh is located along a portion of the southern shoreline. This area contains stands of pickleweed, areas of exposed mud, and small stands of cordgrass (*Spartina* sp.). A tidal channel occurs to the northeast of the pickleweed dominated tidal marsh. At low tide, a large expanse of tidal mudflats is present in the offshore areas bordering the Park. These mudflats are heavily used by a variety of shorebirds including black-necked stilt (*Himantopus mexicanus*), American avocet (*Recurvirostra Americana*), marbled godwit (*Limosa fedoa*), dunlin (*Calidris alpina*), western sandpiper (*Calidris mauri*), willet (*Catoptrophorus semipalmatus*), sanderling (*Calidris alba*), and numerous other avian species.

Other shoreline areas in the Study Area are characterized by rip-rap and concrete reinforcements, as well as large rocks. The offshore areas bordering the Study Area include tidal waters. Some pockets of emergent vegetation are present in limited locations along shoreline, including cordgrass (*Spartina* sp.) and potentially Alkali bulrush (*Bolboschoenus maritimus*). However, the shoreline is largely devoid of emergent vegetation. Small to moderate-sized trees are present along portions of the shoreline.

Existing developed land uses occupy almost the entire Study Area. The northern and central portion of the Study Area includes a mix of well-established heavy industrial uses and more

recent commercial activities, as well as a residential neighborhood. Several heavy industrial activities occur in the area including the Con Agra grain processing plant (located on E. 7th Street.) and Brockway Recycling (located on Alameda Avenue). A Home Depot is located adjacent to I-880 and various other commercial users, including a gymnasium and a sports club, are located on Alameda Avenue. Work/live spaces, single-family bungalows and houses are also present. The southern portion of the Study Area contains a number of businesses in the manufacturing and construction sectors including two sizable aggregate producers of fill materials for public roads, a hardwood lumber company, mini-storage and trucking uses.

Union Point Park is located in the northwestern portion of the Study Area. The park is developed with a playground, paved areas, lawns, and a marina. The park does not contain any natural habitat areas.

Trees present in the developed portions of the Study Area largely include non-native species planted as landscaping or windbreaks, and no natural woodland communities areas are present. The larger trees present include Monterey pine (*Pinus radiata*) and eucalyptus (*Eucalyptus globulus*). The largest cluster of large trees, which potentially includes trees protected by the City of Oakland Protected Tree Ordinance, is located in the northern portion of 23rd Avenue. There are also several undeveloped lots containing a dense growth of weedy plant species in the developed portion of the Study Area; these areas are in a heavily disturbed condition and are of limited biological value.

SENSITIVE BIOLOGICAL RESOURCES

Special-Status Wildlife Species Documented in the Project Area

The latest version of the CNDDB was reviewed to identify documented occurrences of special-status wildlife from within approximately five-miles of the Study Area. As shown in **Figure 2**, there are no documented occurrences of special-status wildlife species from the Study Area, but special-status wildlife species have been documented in the surrounding five-mile area. The special-status wildlife species known from the project area are identified in **Table 1, Special-Status Wildlife Species Documented in the Project Area**, along with their regulatory status, habitat requirements, and an evaluation of their potential to occur in the Study Area.

The Study Area is in an industrial area and is almost entirely developed. The industrial and developed portions of the Study Area do not provide potential habitat for special-status wildlife species. The natural habitat areas remaining in the Study Area are largely associated with MLK Regional Shoreline Park and other shoreline areas. The portion of MLK Regional Shoreline Park

in the Study Area contains habitats that could support special-status wildlife species. The pickleweed tidal marsh habitat present in the Park is not very large, but it does contain a tidal channel, stands of pickleweed, areas of exposed mud, and is partially bordered by upland vegetation. These characteristics are associated with salt marsh harvest mouse, salt-marsh wandering shrew, California clapper rail, and California black rail. As these species are known from the surrounding project area (Figure 1), and because some potential habitat is present, they could occur in the tidal marsh in MLK Regional Shoreline Park. Additionally, for the reasons discussed in Table 1, the following special-status wildlife species also have some potential to occur in portions of MLK Regional Shoreline Park: great egret rookery, great blue heron rookery, burrowing owl (wintering only), northern harrier, white-tailed kite, saltmarsh common yellowthroat, osprey, and Alameda song sparrow. Cooper's hawk and osprey could also potentially nest in other portions of the Study Area (Table 1). While marine habitat is not present in the Study Area, the following special-status aquatic species have potential to occur in the waters bordering the Study Area: green sturgeon, pacific herring, steelhead trout, tidewater goby, and California brackishwater snail.

Table 1
Special-Status Wildlife Species Documented in the Project Area

Common and Scientific Name	Status		Habitat Requirements	Historical and Potential Occurrence
	Federal	State		
Mammals				
Pallid bat *Antrozous pallidus*	--	CSC	Inhabits deserts, grasslands, shrublands, woodlands and forests. Most commonly found in open, dry habitats with rocky areas for roosting. Also known to roost within oak woodlands.	***Not Expected*:** marginal habitat as the species prefers dry habitats and available foraging habitat is largely restricted to estuarine and marsh habitats.
Hoary bat *Lasiurus cinereus*	--	*	The hoary bat is a forest species, typically roosting beneath clusters of leaves during spring, summer, and fall. Generally roosts alone.	***Not Expected*:** suitable forest habitat not present.
Silver-haired bat *Lasionycteris noctivagans*	--	*	These bats are found in forested areas and seldom are observed in xeric areas except in migration. Cavities in trees and spaces under loose bark are favorite daytime retreats but these bats may also use buildings.	***Not Expected*:** suitable forest habitat not present.

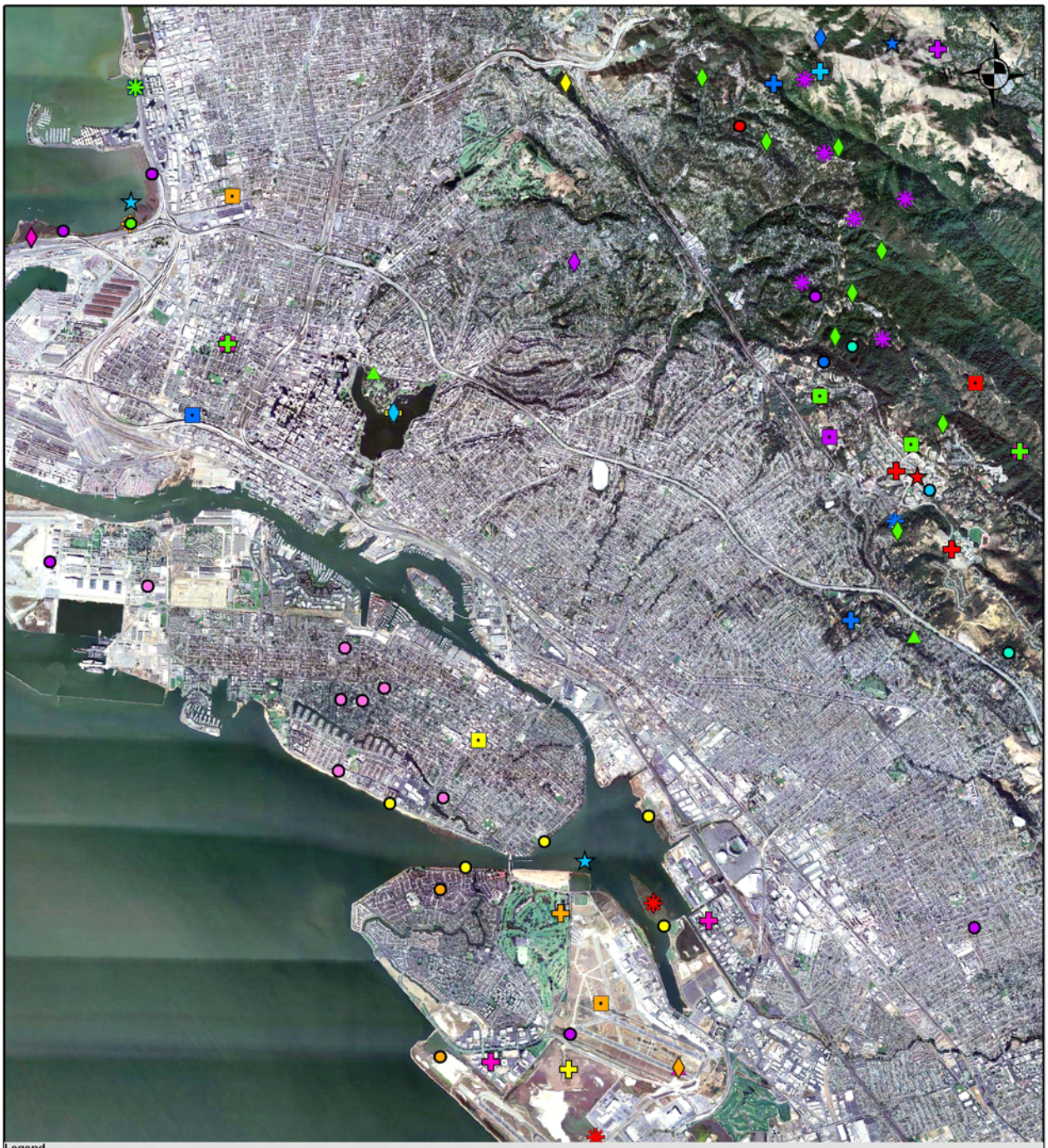
Common and Scientific Name	Status		Habitat Requirements	Historical and Potential Occurrence
	Federal	State		
Alameda Island mole *Scapanus latimanus parvus*	--	CSC	Known only from Alameda Island. No individuals documented since 1958 and there are no observational records that confirm the existence of an extant population.	***Not Expected:*** only historically occurred on Alameda Island and has not been documented since 1958; has never been documented in Oakland.
American badger *Taxidea taxus*	--	CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats with friable soils.	***Not Expected:*** suitable habitat is not present.
Salt marsh harvest mouse *Reithrodontomys raviventhris*	FE	CE, CFP	Pickleweed and salt marsh stands in tidal and diked coastal salt marshes.	***Potential:*** pickleweed stands of potentially adequate size are present in MLK Regional Shoreline Park; the tidal marsh is bordered by upland vegetation which provides refuge habitat for the species during periods of high tide.
Salt-marsh wandering shrew *Sorex vagrans halicoetes*	--	CSC	Salt marshes of the south arm of San Francisco Bay; dense, low-lying pickleweed areas.	***Potential:*** pickleweed stands of potentially adequate size and density are present in MLK Regional Shoreline Park.
Amphibians and Reptiles				
California tiger salamander *Ambystoma californiense*	FT	CSC	Breed in ponds and vernal pools; occupies small mammal burrows in surrounding grassland habitats during most of the year.	***Not Expected:*** suitable breeding and upland habitat is not present.
Western pond turtle *Clemmys marmorata*	--	CSC	Aquatic habitats including ponds, streams, and irrigation ditches. Requires basking sites such as partially submerged logs, vegetation mats, or open mud banks.	***Not Expected*:** only high salinity waters present in and bordering the Study Area.
Alameda whipsnake *Masticolphis lateralis euryxanthus*	FT	CT	Inhabits south facing slopes and ravines where shrubs form vegetation mosaic with oak trees and grasses.	***Not Expected:*** suitable habitat is not present and the project site is outside of expected distribution of the species.
California red-legged frog *Rana draytonii*	FT	CSC, CP	Permanent water sources such as ponds, lakes, reservoirs, streams and adjacent riparian woodlands.	***Not Expected*:** only high salinity waters present in and bordering the Study Area; not documented within five-miles of the Study Area.
Birds				
Cooper's hawk (nesting) *Accipiter cooperi*	--	CSC	Inhabits primarily open, interrupted or marginal woodlands. Nests mainly in riparian groves of deciduous trees in canyon bottoms on river flood-plains. Also nests in coast live oak.	***Potential:*** larger trees in the Study Area provide potential nesting habitat; known to occasionally nests in parks and urban areas.

Common and Scientific Name	Status		Habitat Requirements	Historical and Potential Occurrence
	Federal	State		
Golden eagle (nesting and wintering) *Aquila chrysaetos*	BCC	CSC	Nests and winters in rolling foothills, mountain areas, sage–juniper flats, and deserts; nests on cliff-walled canyons and large trees in open areas.	***Not Expected:*** suitable nesting trees and adequately sized foraging habitat is not present.
Great egret (rookery) *Ardea alba*	--	*	Nests colonially in large trees. Rookery sites are typically located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	***Potential:*** trees present in MLK Regional Shoreline Park provide potential rookery habitat; however, no rookeries have been documented within the park and the number of potentially suitable trees is low.
Great blue heron (rookery) *Ardea herodias*	--	*	Nests colonially in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites are usually in close proximity to foraging areas such as marshes, lake margins, tide-flats, wet meadows, rivers, and streams.	***Potential:*** trees present in MLK Regional Shoreline Park provide potential rookery habitat; however, no rookeries have been documented within the park and the number of potentially suitable trees is low.
Western burrowing owl (occupied burrow sites) *Athene cunicularia*	BCC	CSC	Forages and nests in grasslands and open scrub with small mammal burrows.	***Potential* (wintering only)***:* the species is known to use rocky shoreline habitats as a winter migrant, but not to nest at these locations. If the species were to occur as a winter migrant in the Study Area, it would be expected to be restricted to MLK Regional Shoreline Park given the presence of some suitable foraging habitat.
Western snowy plover *Charadrius alexandrinus nivosus*	FT	CSC	Sandy beaches, salt pond levees, and shorelines of large alkali lakes.	***Not Expected:*** suitable nesting habitat not present.
Northern harrier (nesting) *Circus cyaneus*	--	CSC	Inhabits coastal salt and freshwater marshes. Nests and forages in grasslands, from salt grass in desert sink to mountain cienagas. Nests on ground in shrubby vegetation, usually at marsh edge. Nests are large mounds of sticks in wet areas.	***Potential*:** some potential nesting habitat present within MLK Regional Shoreline Park; potential nesting and foraging habitat is not present elsewhere in the Study Area.
White-tailed kite (nesting) *Elanus leucurus*	--	CFP	Usually nests in large bushes or trees, often in isolated stand, surrounded by open foraging habitat.	***Potential*:** some potential nesting habitat present within MLK Regional Shoreline Park; potential nesting and foraging habitat is not present elsewhere in the Study Area.

Common and Scientific Name	Status		Habitat Requirements	Historical and Potential Occurrence
	Federal	State		
Saltmarsh common yellowthroat (nesting) *Geothlypis trichas sinuosa*	--	CSC	Fresh and salt water marshes; requires thick continuous cover down to water surface for foraging.	***Potential*:** potential nesting habitat present within MLK Regional Shoreline Park; potential nesting and foraging habitat is not present elsewhere in the Study Area.
California black rail *Laterallus jamaicensis coturniculus*	--	CT	Salt marshes bordering larger bays; pickleweed typically present.	***Potential:*** some suitable habitat present in MLK Regional Shoreline Park within the pickleweed dominated marsh.
Alameda song sparrow (nesting) *Melospiza melodia pusilluia*	--	CSC	Inhabits salt marshes bordering south arm of San Francisco Bay. Nests low in grinelia bushes and in salcornia.	***Potential:*** characteristic habitat present in MLK Regional Shoreline Park; potential nesting and foraging habitat is not present elsewhere in the Study Area.
Osprey (nesting) *Pandion haliaetu*	--	CSC	Nests built in tree tops within 15-miles of a good fish producing body of water.	***Potential:*** Larger trees and structures near the bay and estuary provide potential nesting habitat.
Double crested cormorant (rookery) *Phalacrocorax auritus*	--	CSC	Colonial nester on coastal cliffs, offshore islands, bridges, and along lake margins in the interior of the state.	***Not Expected:*** suitable nesting/roosting habitat not present; not known to roost on the bridges in the Study Area.
California clapper rail *Rallus longirostris obsoletus*	FE	CE	Salt marshes bordering larger bays; pickleweed typically present.	***Potential:*** some suitable habitat present in MLK Regional Shoreline Park within the pickleweed dominated marsh. While the marsh is not very large, a tidal channel and areas of exposed mud enhance the suitability of the marsh for the species.
California least tern *Sternula antillarum browni*	FE	CE	Nest along coast; colonial breeder on bare or sparsely vegetated, flat substrates, including sand beaches, alkali flats, land fills, or paved areas.	***Not Expected:*** suitable nesting habitat not present.
Invertebrates				
Monarch butterfly *Danaus plexippus*	--	*	Winters in eucalyptus groves, generally within 1 mile of the coast.	***Not Expected:*** suitable wind protected groves of trees not present; only large grove of trees (on 23rd Ave.) borders I-880 and provides very marginal habitat.
Bay checkerspot butterfly *Euphydryas editha bayensis*	FT	--	Serpentine bunchgrass grassland, larvae feed on *Plantago erecta*	***Not Expected:*** suitable habitat is not present.
California brackishwater snail *Tryonia imitator*	--	*	Inhabits coastal lagoons, estuaries, and salt marshes; found only in permanently submerged areas in a variety of sediment types.	***Potential:*** could occur in tidal waters bordering the Study Area.

Common and Scientific Name	Status		Habitat Requirements	Historical and Potential Occurrence
	Federal	State		
Fish				
Green Sturgeon *Acipenser medirostris*	SC	CSC	Spawn in deep pools or "holes" in large, turbulent, freshwater river mainstems including the Sacramento and Feather Rivers. Adults live in oceanic waters, bays, and estuaries when not spawning. Green sturgeons are believed to spend the majority of their lives in near-shore oceanic waters, bays, and estuaries.	***Potential* (non-spawning):** green sturgeon may be found in the marine and estuarine habitats bordering the Study Area as foraging adults or juveniles. However, spawning populations have been found only in medium sized rivers from the Sacramento-San Joaquin system north.
Pacific herring *Clupea pallasi*	--	**	Spawn over algae and eelgrass first, rocky substrates second, and flat surfaces such as marina pilings, retaining walls, and bulkheads occurring along the San Francisco Bay waterfront last.	***Potential:*** spawning could occur in marine and estuarine habitats bordering the Study Area.
Steelhead trout *Oncorhyncus mykiss*	FT	--	Highly flexible life history and may follow a variety of life-history patterns including freshwater residents (non-migratory) at one extreme and individuals that migrate to the open ocean (anadromous) at another extreme.	***Potential* (non-spawning):** adults and juveniles may occur in the marine and estuarine habitats bordering the Study Area, but spawning habitat is not present.
Tidewater goby *Eucyclogobius newberyi*	FE	CSC	Restricted to coastal, brackish-water habitats in California and are found primarily in discrete lagoons, estuaries or stream mouths.	***Potential:*** the species is tolerant of a very wide range of salinity, temperature, and other water quality conditions, and may occur in the estuarine habitats bordering the Study Area.

FE: Federal Endangered
FT: Federal Threatened
BCC: Federal Bird of Conservation Concern
SC: NMFS Species of Concern List
CE: California Endangered
CSC: California Species of Special Concern
*: CDFG (2008) Special Animals List
**: Otherwise considered Sensitive by the CDFG



Legend

- Alameda Island mole
- Alameda song sparrow
- Alameda whipsnake
- American badger
- Bay checkerspot butterfly
- California black rail
- California clapper rail
- California least tern
- California red-legged frog
- California seablite
- California tiger salamander
- Choris' popcorn-flower
- Congdon's tarplant
- Cooper's hawk
- Diablo helianthella
- Kellogg's horkelia
- Loma Prieta hoita
- Oregon meconella
- Point Reyes bird's-beak
- Presidio clarkia
- San Francisco Bay spineflower
- San Francisco popcorn-flower
- San Joaquin spearscale
- Santa Clara red ribbons
- Santa Cruz tarplant
- Tiburon buckwheat
- adobe sanicle
- alkali milk-vetch
- bent-flowered fiddleneck
- burrowing owl
- foothill yellow-legged frog
- fragrant fritillary
- golden eagle
- hoary bat
- California brackishwater snail
- monarch butterfly
- most beautiful jewel-flower
- pallid bat
- pallid manzanita
- robust monardella
- robust spineflower
- round-leaved filaree
- saline clover
- salt-marsh harvest mouse
- salt-marsh wandering shrew
- saltmarsh common yellowthroat
- silver-haired bat
- slender-leaved pondweed
- tidewater goby
- western leatherwood
- western pond turtle
- western snowy plover

Image: USDA, July 2006, 1-Meter Resolution
Data: CNDDB 2009

0 1.5 3 Miles

FIGURE 2
Central Estuary Project
Documented Special-Status Species
Oakland, CA

Prepared by Pacific Biology, April 2009

Special-Status Plant Species Documented in the Project Area

As shown in **Figure 2**, there are no documented occurrences of special-status plant species from the Study Area, but special-status plant species have been documented in surrounding areas. These special-status plant species are identified in **Table 2, Special-Status Plant Species Documented in the Project Area**, along with their regulatory status, habitat requirements, and an evaluation of their potential to occur in the Study Area.

As previously discussed, the Study Area is in an industrial area and is almost entirely developed. The industrial and developed portions of the Study Area do not provide potential habitat for special-status plant species. The natural habitat areas remaining in the Study Area are largely associated with MLK Regional Shoreline Park. As shown below in Table 1, only one special-status plant species (i.e., **Point Reyes bird's-beak**) has potential to occur in the Study Area. The marsh habitats in MLK Regional Shoreline Park, and potentially other shoreline areas in the Study Area, provide potential habitat for this species.

Table 2
Special-Status Plant Species Documented in the Project Area

Common and Scientific Name	Status			Habitat Requirements	Flowering Period	Potential On-Site Occurrence
	Federal	State	CNPS			
Alkali milk-vetch *Astragalus tener* var. *tener*	--	--	List 1B.2	Low ground, alkali flats, and flooded lands within valley and foothill annual grassland habitats or playas; also found in vernal pools. Elevation 1–170 meters.	March–June	***Not Expected:*** suitable habitat not present in the Study Area.
Round-leaved filaree *California macrophylla*	--	--	List 1B.1	Cismontane woodland, valley and foothill grassland / clay	March-May	***Not Expected:*** suitable habitat not present in the Study Area.
Congdon's tarplant *Centromadia parryi* spp. *congdonii*	--	--	List 1B.2	Valley and foothill grassland with alkaline soils, sometimes described as heavy, white clay. Elevation 1–230 meters.	May–October	***Not Expected:*** suitable habitat not present in the Study Area.
San Francisco Bay spineflower *Chorizanthe cuspidata* var. *cuspidata*	--	--	List 1.B.2	Coastal bluff scrub, coastal dunes, coastal prairie, coastal scrub	April-July	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.

Common and Scientific Name	Status			Habitat Requirements	Flowering Period	Potential On-Site Occurrence
	Federal	State	CNPS			
Robust spineflower *Chorizanthe robusta* var. *robusta*	FE	--	List 1.B.1	Chaparral, cismontane woodland, coastal dunes, coastal scrub/sandy or gravelly.	April-September	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.
Point Reyes bird's-beak *Cordylanthus maritimus* ssp. *palustris*	--	--	List 1B.2	Marshes and swamps (coastal salt)	June-October	***Potential:*** potential habitat present in MLK Regional Shoreline Park and potentially other shoreline areas.
Western leatherwood *Dirca occidentalis*	--	--	List 1B.1	Broadleafed upland forest, closed-cone coniferous forest, chaparral, cismontane woodland, north coast coniferous forest, riparian forest, riparian woodland.	June-March	***Not Expected:*** suitable habitat not present in the Study Area.
Tiburon buckwheat *Eriogonum luteolum* var. *caninum*	--	--	List 1B.2	Chaparral, cismontane woodland, coastal prairie, valley and foothill grassland/serpentinite sandy to gravelly	May-September	***Not Expected:*** suitable habitat not present in the Study Area.
Fragrant fritillary *Fritillaria liliacea*	--	--	List 1B.2	Cismontane woodland, coastal prairie, coastal scrub, valley and foothill grassland/often serpentinite.	February–April	***Not Expected:*** suitable habitat not present in the Study Area.
Diablo helianthella *Helianthella castanea*	--	--	List 1B.2	Broadleaved upland forest, chaparral, cismontane woodland, coastal scrub, riparian woodland, valley and foothill grassland. Usually in chaparral/oak woodland interface in rocky, azonal soils. Often in partial shade.	March–June	***Not Expected:*** suitable habitat not present in the Study Area.
Loma Prieta hoita *Hoita strobilina*	--	--	List 1B.1	Chaparral, cismontane woodland, riparian woodland.	May-July	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.
Santa Cruz tarplant *Holocarpha macradenia*	FT	CE	List 1B.1	Coastal prairie, coastal scrub, valley and foothill grassland/often clay, sandy	June-October	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.
Kellogg's horkelia *Horkelia cuneata* ssp. *sericea*	--	--	List 1B.1	Closed cone coniferous forest, chaparral, coastal dunes, coastal scrub/sandy or gravelly openings	April-September	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.

Common and Scientific Name	Status			Habitat Requirements	Flowering Period	Potential On-Site Occurrence
	Federal	State	CNPS			
Oregon meconella *Meconella oregana*	--	--	List 1.B.1	Coastal Prairie, coastal scrub	March-April	***Not Expected:*** suitable habitat not present in the Study Area.
Robust monardella *Monardella villosa* ssp. *globosa*	--	--	List 1B.2	Chaparral (openings), cismontane woodland, coastal scrub.	June–July	***Not Expected:*** suitable habitat not present in the Study Area.
Choris' popcorn flower *Plagiobothrys chorisianus* var. *chorisianus*	--	--	List 1.B.2	Chaparral, coastal prairie, coastal scrub	March-June	***Not Expected:*** suitable habitat not present in the Study Area.
San Francisco popcorn-flower *Plagiobothrys diffusus*	--	CE	List 1.B.1	Coastal prairie, valley and foothill grassland	March-June	***Not Expected:*** suitable habitat not present in the Study Area.
Slender-leaved pondweed	--	--	List 2.2	Marshes and swamps (assorted shallow freshwater)	May-July	***Not Expected:*** suitable habitat not present in the Study Area.
Adobe sanicle *Sanicula maritima*	--	CR	List 1B.1	Chaparral, coastal prairie, meadows and seeps, valley and foothill grasslands / clay serpentinite	February-May	***Not Expected:*** suitable habitat not present in the Study Area; extirpated from Alameda County.
Most beautiful jewel-flower *Streptanthus albidus* ssp. *peramoenus*	--	--	List 1B.2	Chaparral, cismontane woodland, valley and foothill grassland / serpentinite . Elevation 120–1000 meters.	Annual herb April–June	***Not Expected:*** suitable habitat not present in the Study Area.
California seablite *Suaeda californica*	FE	--	List 1B.1	Marshes and swamps (coastal salt)	July–October	***Not Expected:*** some potential habitat present in MLK Regional Shoreline Park, but the species is extirpated from Alameda County.
Saline clover *Trifolium depauperatum* var. *hydrophilum*	--	--	List 1B.2	Marshes and swamps, valley and foothill grassland (mesic, alkaline), vernal pools	April-June	***Not Expected:*** suitable habitat not present in the Study Area; species not associated with coastal salt habitats.

STATUS KEY:
Federal and State:
FE = Federal Endangered
FT=Federal Threatened
CE=California Endangered
CR=California Rare

CNPS
List 1A = Plants presumed extinct in California
List 1B = Plants Rare, Threatened, or Endangered in California and elsewhere
.1 = seriously Endangered in California
.2 = fairly Endangered in California
.3 = not very Endangered in California

Jurisdictional Resources

Section 404 of the Clean Water Act

Section 404 of the *Clean Water Act* requires that a permit be obtained from the U.S. Army Corps of Engineers (USACE) prior to the discharge of dredged or fill materials into any "waters of the United States or wetlands." Waters of the United States are broadly defined in the USACE's regulations (33 CFR 328) to include navigable waterways, their tributaries, lakes, ponds, and wetlands. Wetlands are defined as: "Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that normally do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas" (Federal Register 1982). Wetlands that are not specifically exempt from Section 404 regulations (such as drainage channels excavated on dry land) are considered to be "jurisdictional wetlands." The USACE is required to consult with the U.S. Fish and Wildlife Service, Environmental Protection Agency, State Regional Water Quality Control Board, and California Department of Fish and Game (among other agencies) in carrying out its discretionary authority under Section 404. The USACE grants two types of permits, individual and nationwide. Project-specific individual permits are required for certain activities that may have a potential for more than a minimal impact and necessitate a detailed application.

The tidal marshes and estuarine habitats in MLK Regional Shoreline Park and the tidal waters bordering the Study Area are under the jurisdiction of the USACE. A permit from the USACE would be required for any work that would result in fill being deposited into these habitats.

Federal Endangered Species Act of 1973

Section 3 of the Federal Endangered Species Act (FESA) defines an endangered species as any species or subspecies of fish, wildlife, or plants "in danger of extinction throughout all or a significant portion of its range." A threatened species is defined as any species or subspecies "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." Designated endangered andthreatened species, as listed through publication of a final rule in the Federal Register, are fully protected from a "take" without an incidental take permit administered by the U. S. Fish and Wildlife Service (USFWS) under Section 10 of the FESA. Take means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct (50 CFR 17.3). Proposed endangered or threatened species are those for which a proposed regulation, but not a final rule, has been published in the Federal Register.

Section 7 of the FESA requires that federal agencies ensure that their actions are not likely to jeopardize the continued existence of a listed species or destroy or adversely modify its critical habitat. This obligation requires federal agencies to consult with the USFWS on any actions (issuing permits including Section 404 permits, issuing licenses, providing federal funding) that may affect listed species to ensure that reasonable and prudent measures will be undertaken to mitigate impacts on listed species.

If the proposed project would affect tidal marsh habitats in MLK Regional Shoreline Park, then consultation under Section 7 may be required for potential impacts to the federally-listed salt marsh harvest mouse and California clapper rail. If offshore aquatic habitats would be affected, then consultation under Section 7 may be required for potential impacts to federally-listed fish species.

California Fish and Game Code (Section 1602)

Streambeds are generally subject to regulation by the CDFG under Sections 1602 of the California Fish and Game Code. A stream is defined under these regulations as a body of water that flows at least periodically or intermittently through a bed or channel having banks and that supports fish or other aquatic life. This definition includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation. CDFG generally asserts its jurisdiction to the edge of the riparian vegetation canopy associated with any stream. Any work within a streambed or the removal of associated riparian vegetation requires the acquisition of a Streambed Alteration Agreement from the CDFG.

The estuarine channel in MLK Regional Shoreline Park is expected to be under the jurisdiction of the CDFG. A Streambed Alteration Agreement from the CDFG would be required for any work affecting the bed and/or banks of the estuarine channel.

California Endangered Species Act

The *California Endangered Species Act* (CESA) declares that deserving plant or animal species will be given protection by the state because they are of ecological, educational, historical, recreational, aesthetic, economic, and scientific value to the people of the state. CESA established that it is state policy to conserve, protect, restore, and enhance endangered species and their habitats. Under State law, plant and animal species may be formally designated rare, threatened, or endangered by official listing by the California Fish and Game Commission. Listed species are generally given greater attention during the land use planning process by local governments, public agencies, and landowners than are species that have not been listed.

CESA authorizes that "Private entities may take plant or wildlife species listed as endangered or threatened under the federal ESA and CESA, pursuant to a federal incidental take permit issued in accordance with Section 7 or 10 of the federal ESA, if the California Department of Fish and Game (CDFG) certifies that the incidental take statement or incidental take permit is consistent with CESA (Fish & Game Code §2080.1(a)).

If the proposed project would affect tidal marsh habitats in MLK Regional Shoreline Park, then consultation with the CDFG may be required for potential impacts to the state-listed California black rail.

Porter-Cologne Water Quality Control Act

The *Porter-Cologne Water Quality Control Act* charges the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCB) statewide with protecting water quality throughout California. Typically, the SWRCB and RWQCB act in concert with the USACE under Section 401 of the *Clean Water Act* in relation to permitting fill of federally jurisdictional waters. Waters of the state are defined in Section 13050(e) of the *Porter-Cologne Water Quality Control Act* as "…any surface water or groundwater, including saline waters, within the boundaries of the state." Currently, an applicant would delineate the wetlands on their property utilizing methodology presented in the 1987 U.S. Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987) and the delineation would be verified by the USACE. In cases where an area meets the criteria to be considered a wetland, but the USACE does not have jurisdiction, the applicant is referred to the appropriate RWQCB. For the project area, the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) could exercise its jurisdiction over wetlands where a project does not require a federal permit, but involves removal or placement of material into Waters of the State.

The tidal marshes and estuarine habitats in MLK Regional Shoreline Park and the tidal waters bordering the Study Area are under the jurisdiction of the RWQCB. A Section 401 clean water certification or waiver will be required for any actions affecting these areas.

The McAteer-Petris Act (California Government Code 66600–66682)

The *McAteer-Petris Act* created the San Francisco Bay Conservation and Development Commission (BCDC) in 1965. BCDC's mission is the preservation of San Francisco Bay from indiscriminate filling. BCDC's first task was compilation of a comprehensive study of the Bay and determining how future development of the Bay should occur. This effort resulted in the San Francisco Bay Plan in 1968. In 1969 the findings and policies of the Bay Plan were incorporated

into the *McAteer-Petris Act* which was amended making BCDC a permanent state agency. Section 66610 of the *McAteer-Petris Act* establishes the boundaries of San Francisco Bay in relation to BCDC's jurisdiction. Essentially, all areas below the mean high tide line and an area within a shoreline band that extends landward for 100 feet from the mean high tide line are subject to their jurisdiction. Section 66632 of the *McAteer-Petris Act* establishes the permitting process for projects which would place fill in, on, or over any part of BCDC's jurisdiction as defined in Section 66610. Any project components that would be in the water or within a 100-foot shoreline band would be subject to BCDC's jurisdiction.

CONCLUSIONS

The Study Area is in an industrial area and is almost entirely developed. In general, the industrial and developed portions of the Study Area do not provide potential habitat for special-status plant or wildlife species. However, there is some potential that Cooper's hawk could nest in portions of the Study Area with relatively dense stands of trees and that osprey could nest in trees or on structures along the shoreline. The natural habitat areas remaining in the Study Area are largely associated with MLK Regional Shoreline Park. The portion of the Park in the Study Area has potential to support one special-status plant species (i.e., Point Reyes bird's-beak) and the following special-status wildlife species: salt marsh harvest mouse, salt-marsh wandering shrew, California clapper rail, California black rail, Alameda song sparrow, great egret rookery, great blue heron rookery, burrowing owl (wintering only), northern harrier, white-tailed kite, saltmarsh common yellowthroat, and osprey. Additionally, several special-status fish species could occur in the marine and estuarine habitats bordering the Study Area. Therefore, should the development of the Specific Plan affect tidal marsh or marine/estuarine habitats, then consultation with the USFWS may be required and avoidance measures to protect federally-listed and other special-status species would be implemented. Additionally, any work affecting tidal marsh or marine/estuarine habitats would require permits from the USACE, RWQCB, and BCDC.