SECTION 3.3
Biological Resources

3.3.1 Introduction

This section evaluates the potential for the proposed program to result in adverse impacts on biological resources related to special-status species, sensitive natural communities, jurisdictional resources, wildlife movement and nursery sites, and consistency with local policies and conservation plans protecting biological resources. The analysis is based on a review of available biological reports of the program area and vicinity, including site-specific investigations conducted for each of the four areas that comprise the proposed program, as well as, relevant regulatory ordinances. This section identifies the potential for both program-level and cumulative environmental impacts to occur, as well as feasible mitigation measures that would minimize or avoid the proposed program's impacts on sensitive biological resources.

Information sources for the analysis presented in this section include the following technical reports:

- *Supplemental Biological Surveys and Mapping for the Los Cerritos Wetlands* (Coastal Restoration Consultants [CRC] 2019 [Appendix C1).
- *Biological Technical Report for Los Cerritos Wetlands Oil Consolidation and Restoration Project* (Glenn Lukos Associates Inc. [GLA]) 2017a [see Appendix C1]).
- *Jurisdictional Delineation for the Los Cerritos Wetlands Oil Consolidation and Restoration Project* (GLA 2017b [see Appendix C1]).
- *Restoration Plan for the Upper Los Cerritos Wetlands Mitigation Bank* (GLA 2017c [see Appendix C2]).
- *Technical Memorandum—Impacts to Areas that Potentially Meet the California Coastal Act (CCA) Definition for Environmentally Sensitive Habitat Areas (ESHA) Associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project, Long Beach, California* (GLA 2017d [see Appendix C3]).
- *Technical Memorandum—Belding's Savannah Sparrow Surveys for 76.52-Acre Proposed Mitigation Bank at Synergy Oil Field, Long Beach, California* (GLA 2017e [see Appendix C1]).
- *Biological Resources Assessment and Wetland Delineation: Southeast Area Development and Improvement Plan* (Placeworks and VCS Environmental 2016).
- *Los Cerritos Wetlands Conceptual Restoration Plan Habitat Assessment Report* (Tidal Influence 2012).

All information sources used are included as citations within the text; sources are listed in Section 3.3.7, *References*.

3.3.2 Environmental Setting

The proposed program includes the implementation of a restoration program for the Los Cerritos Wetlands Complex located in the South Area, Isthmus Area, Central Area and North Area. These areas within the proposed program coverage area expand into portions of the City of Seal Beach, City of Long Beach, Los Angeles County and Orange County.

3.3.2.1 Literature Review and Field Surveys

Biologists from GLA conducted detailed biological assessments and surveys on the program area (i.e., North and Central Areas) between 2010 and 2017. These surveys included the following: focused surveys for special-status plants and animals; vegetation mapping; delineation and assessment of wetlands and other aquatic resources; and general and focused biological surveys to obtain floral and faunal inventories, including wintering and breeding season surveys for the burrowing owl (*Athene cunicularia*) and focused surveys for special-status plants. In addition, Tidal Influence has conducted informal surveys for special-status species since 2006, including mapping of vegetation, general reconnaissance surveys and habitat assessments in 2011 in the four areas of the proposed program. More recently, CRC conducted supplemental surveys in 2018 that included updated vegetation mapping, a jurisdictional wetlands and waters assessment, mapping of Environmentally Sensitive Habitat Areas (ESHA), focused surveys for three special-status plants, and opportunistic avian observations on the four areas of the proposed program. The LCWA and City of Long Beach have also facilitated surveys for a portion of the Central Area. Additionally, the four areas within the proposed program were evaluated for the presence of waters potentially subject to the jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), California Department of Fish and Wildlife (CDFW), as well as wetlands as defined under the California Coastal Commission (CCC). These survey efforts have assisted in understanding the sensitive biological resources that occur, or have a potential to occur, in the program area, and the associated technical reports are listed above in Section 3.3.1, *Introduction*.

A summary of the surveys conducted within the program area is described below and further detailed in the biological studies provided in Appendix C1.

Botanical Surveys

In 2019, CRC conducted a review of the California Native Plant Society (CNPS) On-line Inventory and the California Natural Diversity Database (CNDDB) (CRC 2019) to identify special-status plants and wildlife species that have been previously documented in the region. The areas that were queried included the United States Geological Survey (USGS) 7.5’ minute quadrangle map for Anaheim, La Habra, Long Beach, Los Alamitos, Newport Beach, Seal Beach, South Gate and Whittier. The results of these database searches revealed special-status plant species that may have the potential to occur within the proposed program area. A complete list of plant species observed within the program area during CRC’s 2019 assessment is provided in the floral compendium included in the Supplemental Biological Technical Report (Appendix C1).

General Surveys

Numerous botanical surveys and jurisdictional delineations have been conducted within the proposed program area by GLA between 2010 and 2017, and surveys were conducted by Tidal Influence in 2011 and CRC in 2018. During these visits, general botanical surveys were conducted that included detailed plant inventories.

Focused Botanical Surveys

Focused botanical surveys were conducted at the Central Area (Pumpkin Patch site) in 2011, 2013, and 2016; and focused botanical surveys for the North Area (Synergy Oil Field site) were conducted in 2015 and 2016. During the 2015 survey, there was a significant focus on southern tarplant on the North Area (Synergy Oil Field site) because of the substantial numbers observed germinating early in the season that year. These surveys were conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFG 2009). Focused botanical surveys were conducted in all four areas in 2018 by CRC but focused only on three species: southern tarplant (*Centromadia parryi* ssp. *australis*), Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*), and Lewis' evening primrose (*Camissoniopsis lewisii*). Additionally, botanical surveys and jurisdictional delineations were also performed on the City Property site by AECOM, Tidal Influence, and Vandermost Consulting Services, Inc. (VCS) as set forth in the 2016 Biological Resources Assessment and Wetland Delineation: Southeast Area Development and Improvement Plan (Placeworks and VCS Environmental 2016).

Vegetation Mapping

Vegetation was mapped at the alliance[1] or stand[2] level based on the A Manual of California Vegetation, Second Edition (MCV II) (Sawyer et al. 2009) to the extent possible; however, in some cases, vegetation was characterized based on species dominance. Where applicable, guidelines set forth in Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018b) were implemented during the vegetation mapping efforts.

Wildlife and Habitat Assessments

Habitat assessments were conducted on all four areas within the proposed program in 2011. In addition, focused surveys for burrowing owl were conducted on the North Area (i.e., Synergy Oil Field) and Central Area (i.e., Pumpkin Patch and Central LCWA sites) during the 2015 breeding season and on portions of these areas during the 2016/2017 wintering season. No burrowing owls were detected during these surveys. Focused surveys for Belding's savannah sparrow were conducted in the spring of 2017 to determine the approximate number and extent of breeding territories within the North Area (i.e., Synergy Oil Field). During these focused surveys, and during the habitat assessment conducted in 2011, incidental observations of wildlife, including evidence of presence (e.g., tracks, scat, burrows, etc.), were recorded by field biologists. A

[1] A classification unit of vegetation, containing one or more associations and defined by one or more diagnostic species, often of high cover, in the uppermost layer or the layer with the highest canopy cover.

[2] An actual area of vegetation that is homogenous in species composition and structure and in a uniform habitat.

complete list of wildlife species observed, or that are expected to occur within the proposed program area is provided in the Faunal Compendium (see Appendix C1).

Jurisdictional Delineation

A jurisdictional delineation was conducted for portions of the North and Central Areas in 2016 by GLA, and a supplemental assessment was conducted for the remaining North and Central Areas as well as the Isthmus Area and South Area in 2018 by CRC. The limits of USACE, CDFW and CCC jurisdiction were recorded during the delineation on wetland data sheets (Appendix C1).

The 2016 jurisdictional delineation was conducted using the methodology set forth in the United States Army Corps of Engineers 1987 Wetland Delineation Manual (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 (AWS v2.0). While in the field, the limits of USACE/RWQCB/CDFW jurisdiction and wetlands defined by the CCA were recorded using sub-meter GPS technology and/or recorded on a color aerial photograph using visible landmarks.

The 2018 jurisdictional assessment was conducted to identify and map potential federal waters that are likely to be considered jurisdictional by the USACE and potential state waters that are likely to be considered jurisdictional by the RWQCB, CDFW and CCC jurisdiction within the program area. The assessment conducted was not a formal jurisdictional delineation using the USACE 1987 Wetland Delineation Manual and supplementary protocols and guidance documents. The jurisdictional assessment was based on the vegetation mapping done in 2018. Certain vegetation alliances and stands and unvegetated habitats were assumed to be strongly associated with jurisdictional areas.

3.3.2.2 Program Area

South Area

The South Area comprises approximately 206 acres, nearly half of which is mostly unvegetated due to development or regular mowing and disking. Vegetated areas are mostly weedy uplands or tidal and non-tidal pickleweed (*Salicornia pacifica*) wetland. Weedy upland areas are generally dominated by non-native invasive plant species (mustards, grasses, ice plants, and in some areas, weedy species tolerant of salty soils). Descriptions of the vegetation communities within the program area are included in Section 3.3.2.3 below.

The South Area supports a large expanse of tidally influenced wetlands. Tidewater enters the area via a culvert from the San Gabriel River and flows through tidal channels and inundates mud flat, salt marsh and salt flat habitats. The intertidal areas support a wide range of native salt marsh plants. About 70% of the area is heavily disturbed or developed upland, managed for fuel breaks, or weedy upland.

Much of the South Area contains oil facilities that are not subject to tidal influence, and includes areas that support salt marsh alliances and/or areas with non-native ruderal species. The central portion of the area lacks tidal influence and contains the highest concentration of oil facilities including pipeline, tank farms, and numerous pads and roads.

Isthmus Area

The Isthmus Area comprises approximately 26 acres and is long and narrow. It is constrained by complex ownership, flood control structures (the San Gabriel River levee), and other human-made features including the Haynes Cooling Channel, roadways, oil operations, and fuel breaks around oil operations. About one third of the Isthmus is developed (roads and oil operations). The vegetated portions of the site are slightly fragmented and include mainly restoration/mitigation areas, pickleweed marsh, and weedy upland dominated by five-horn smotherweed (*Bassia hyssopifolia*). Other intertidal habitats occur adjacent to the pickleweed marsh and are supported by limited tidal flows delivered via culverts from the San Gabriel River.

Central Area

The Central Area comprises approximately 102 acres and contains a mosaic of wetland alliances mixed with areas disturbed by ongoing oil extraction activities.

North Area

The North Area comprises approximately 155 acres and contains an active oil field with a network of roads, pipelines and other oil field-related amenities. The northern portion of the site contains Steamshovel Slough, an area of tidally influenced southern coastal salt marsh, tidal channels, and mud flats. Steamshovel Slough contains no oil operations and is separated from the oil operation areas by an earthen berm. A tide gate near the mouth of the Steamshovel Slough and series of pipes allow tidal water into western portions of the North Area.

Much of the North Area contains oil facilities that are not subject to tidal influence, and includes areas that support salt marsh alliances and/or areas with non-native ruderal species. The southern portion of the area has tidal influx through leaky tide gates to support limited areas of coastal wetlands vegetation and mudflats and contains the highest concentration of oil facilities including pipeline, tank farms, and numerous pads and roads. This area is diverse, supporting vegetation alliances often consistent with the presence of coastal wetlands, along with areas of non-native herbaceous plants, goldenbush scrub, and non-native herbs.

3.3.2.3 Vegetation Communities

Descriptions of the vegetation associations within the proposed program area have been separated into “upland habitats” and “wetland habitats.” In some cases, certain vegetation associations include both wetland and non-wetland stands (e.g., mulefat scrub) where the upland/wetland status was based on a predominance of wetland indicators such as indicator species, wetland soils and wetland hydrology. **Table 3.3-1**, *Summary of Vegetation Alliances and Land-Cover Types: Program Area*, through **Table 3.3-4**, *Special-Status Plants with Potential to Occur within the Program Area*, summarize the vegetation alliances and land cover types for each of the four areas of the proposed program, followed by detailed descriptions of each individual site. The majority of vegetation data was provided by the CRC (CRC 2019) and supplemented by GLA (GLA 2017a). The CDFW state rankings for natural communities are listed in parenthesis alongside each of the vegetation communities described below. CDFW sensitive natural communities include those communities given a state rank of S1-S3 (CDFW 2019a).

The state rank is a reflection of the condition and imperilment of an element throughout its range within the state. The state ranks are described below and represent a letter+number score that reflects a combination of Rarity, Threat and Trend factors, weighted more heavily on the rarity factors (CDFW 2017a).

S1: Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled – Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state.

S3: Vulnerable – Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S4: Apparently Secure – Uncommon but not rare; some cause for long-term concern due to declines or other factors.

S5: Secure – Common, widespread, and abundant in the state.

? Qualifier: Inexact or Uncertain – A question mark represents a rank qualifier, denoting an inexact or uncertain numeric rank.

SNR: Unranked – State conservation status not yet assessed.

Vegetation alliances that occur within the program area are listed below in **Table 3.3-1**, *Summary of Vegetation Alliances and Land-Cover Types: Program Area*, displayed on **Figure 3.3-1a**, *Vegetation Communities-South Area*, through **Figure 3.3-1d**, *Vegetation Communities – North Area*, and are described below. A brief overview of each individual area is included following the description of vegetation alliances.

Upland Alliances and Land-Cover Types

***Atriplex lentiformis* Shrubland Alliance (S4).** Quailbush (*Atriplex lentiformis*) is a large evergreen shrub and is dominant in the shrub canopy. The canopy is open to intermittent, and the herbaceous layer is variable. Stands occur on heavy salt-affected soils that may be upland, transition, or wetlands. The understory in these areas typically consists of non-native grasses and forbs.

***Baccharis pilularis* Shrubland Alliance (S5).** Coyote brush (*Baccharis pilularis*) is a large drought-tolerant evergreen shrub that tolerates seasonally waterlogged soils. A few small, scattered patches of the vegetation type occur in upland areas. The patches are dominated by coyote brush and the understory typically consists of non-native grasses and forbs.

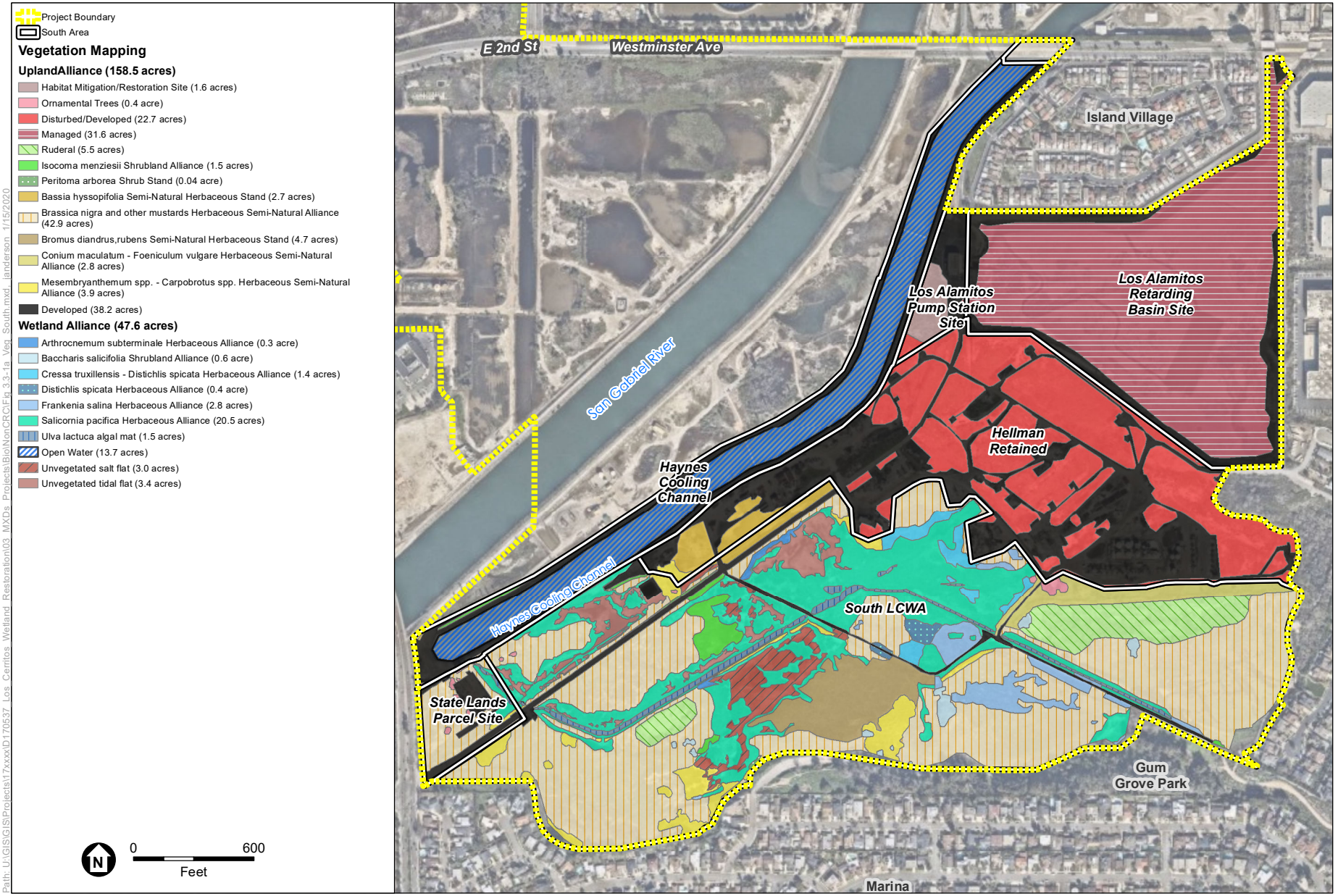
TABLE 3.3-1
SUMMARY OF VEGETATION ALLIANCES AND LAND-COVER TYPES: PROGRAM AREA

Vegetation	South Area (acres)	Isthmus Area (acres)	Central Area (acres)	North Area (acres)	Program Area (acres)
Upland Alliances and Land Covers					
Atriplex lentiformis Shrubland Alliance			0.03		0.03
Baccharis pilularis Shrubland Alliance			0.05	0.41	0.46
Baccharis salicifolia Shrubland Alliance			0.06	1.28	1.34
Baccharis salicina Provisional Shrubland Alliance				0.04	0.04
Bassia hyssopifolia Semi-Natural Herbaceous Stand	2.69	1.87		3.49	8.05
Brassica nigra and other mustards Herbaceous Semi-Natural Alliance	42.94	0.41	2.63		45.98
Bromus diandrus, rubens Semi-Natural Herbaceous Stand	4.67		4.15	8.34	17.16
Carpobrotus edulis or Other Ice Plants Semi-Natural Herbaceous Stands	3.95			2.79	6.74
Centaurea (solstitialis, melitensis) Semi-Natural Herbaceous Stands				2.97	2.97
Conium maculatum – Foeniculum vulgare Herbaceous Semi-Natural Alliance	2.79				2.79
Cortedaria (jubata, selloana) Semi-Natural Herbaceous Stands				0.20	0.20
Developed	38.19	9.13	18.24	2.22	67.78
Disturbed/Developed	22.73		3.32	22.37	48.42
Habitat Mitigation/Restoration Site	1.63	6.39			8.02
Isocoma menziesii Shrubland Alliance	1.52	1.04	0.10	0.62	3.28
Leymus cinereus – Leymus triticoides Herbaceous Alliance			0.18		0.18
Managed	31.60				31.60
Melilotus (indicus, albus) Semi-Natural Herbaceous Stands				0.34	0.34
Mesembryanthemum spp. – *Carpobrotus* spp. Herbaceous Semi-Natural Alliance			0.90		0.90
Ornamental Trees	0.39	0.01	0.55	2.47	3.42
Peritoma arborea Shrub Stand	0.04				0.04
Ricinus communis Semi-Natural Stand			0.49		0.49
Ruderal	5.49				5.49
Sisymbrium irio Semi-Natural Herbaceous Stands				1.34	1.34
Unvegetated Flats (Upland)				4.32	4.32
Upland Alliances Subtotal	*158.63*	*18.85*	*30.7*	*53.20*	*261.38*

TABLE 3.3-1
SUMMARY OF VEGETATION ALLIANCES AND LAND-COVER TYPES: PROGRAM AREA

Vegetation	South Area (acres)	Isthmus Area (acres)	Central Area (acres)	North Area (acres)	Program Area (acres)
Wetland Alliances and Land Covers					
Anemopsis californica – Helianthus nuttallii – Solidago spectabilis Herbaceous Alliance			0.01		0.01
Arthrocnemum subterminale Herbaceous Alliance	0.31		0.01	11.96	12.28
Baccharis salicifolia Shrubland Alliance	0.59		2.74		3.33
Cressa truxillensis – Distichlis spicata Herbaceous Alliance	1.42		0.45	0.54	2.41
Distichlis littoralis Herbaceous Alliance				0.52	0.52
Distichlis spicata Herbaceous Alliance	0.44		10.14	12.08	22.66
Frankenia salina Herbaceous Alliance	2.78	0.51	1.32	0.87	5.48
Open Water	13.67		17.33	0.73	31.73
Salicornia pacifica Herbaceous Alliance	20.45	4.81	26.67	53.07	105.00
Salix gooddingii Woodland Alliance			0.22	0.14	0.36
Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia) Herbaceous Alliance			3.71		3.71
Schoenoplectus californicus Herbaceous Alliance			0.02		0.02
Spartina foliosa Herbaceous Alliance				1.38	1.38
Tidal Channel				3.18	3.18
Typha domingensis—Herbaceous Alliance				0.11	0.11
Ulva lactuca algal mat	1.55	1.00			2.55
Unvegetated salt flat	2.96	1.88	3.87	0.15	8.86
Unvegetated tidal flat	3.43		0.37	17.55	21.35
Wetland Alliances Subtotal	*47.60*	*8.20*	*66.86*	*102.28*	*224.94*
Total	**206.23**	**27.05**	**97.56**	**155.48**	**486.32**

SOURCE: Coastal Restoration Consultants, 2019, Glenn Lukos, 2017a.

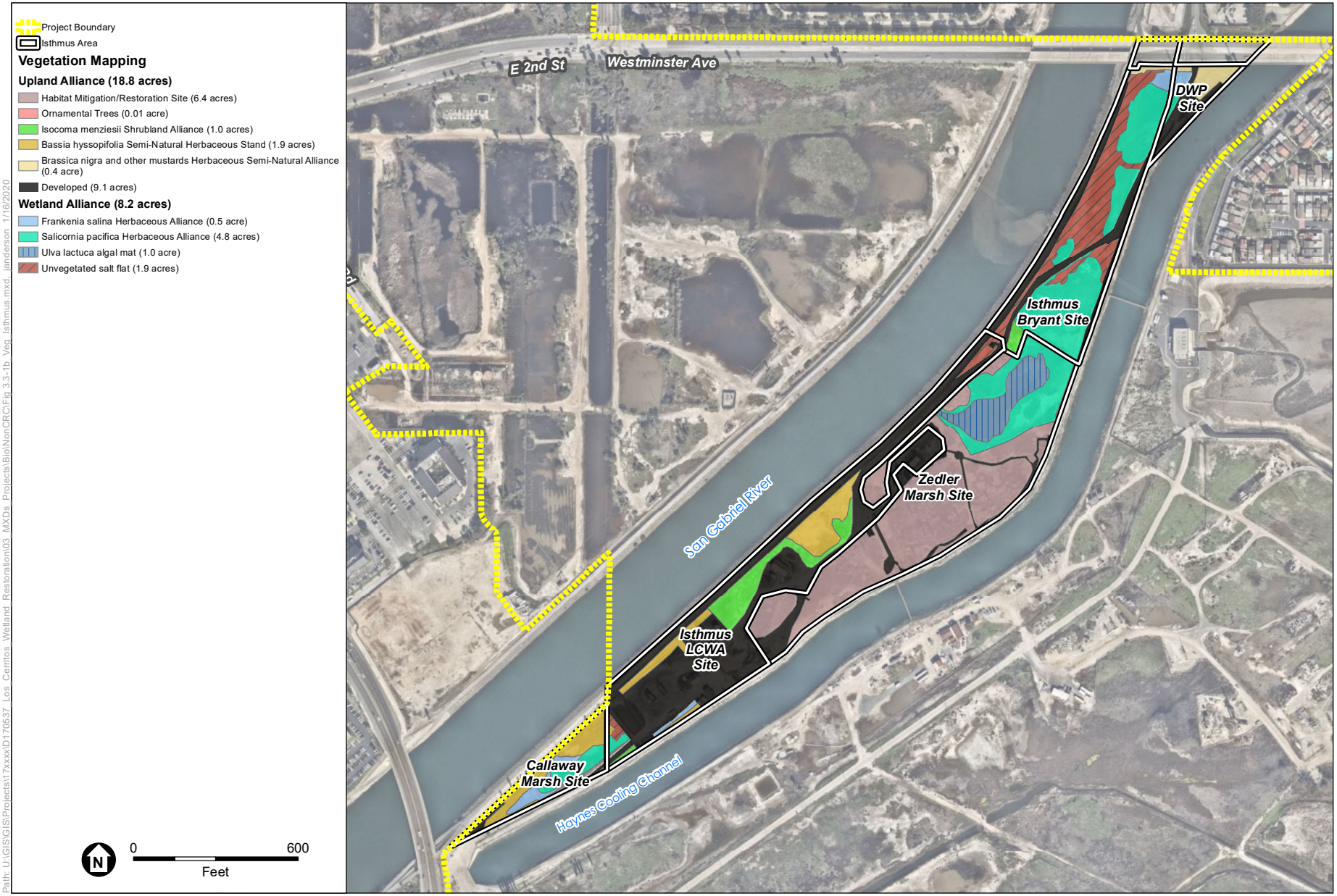


SOURCE: Mapbox, LCWA, CRC

Los Cerritos Wetlands Restoration Plan Draft Program EIR

Figure 3.3-1a
Vegetation Communities
South Area

ESA



SOURCE: Mapbox, LCWA, CRC

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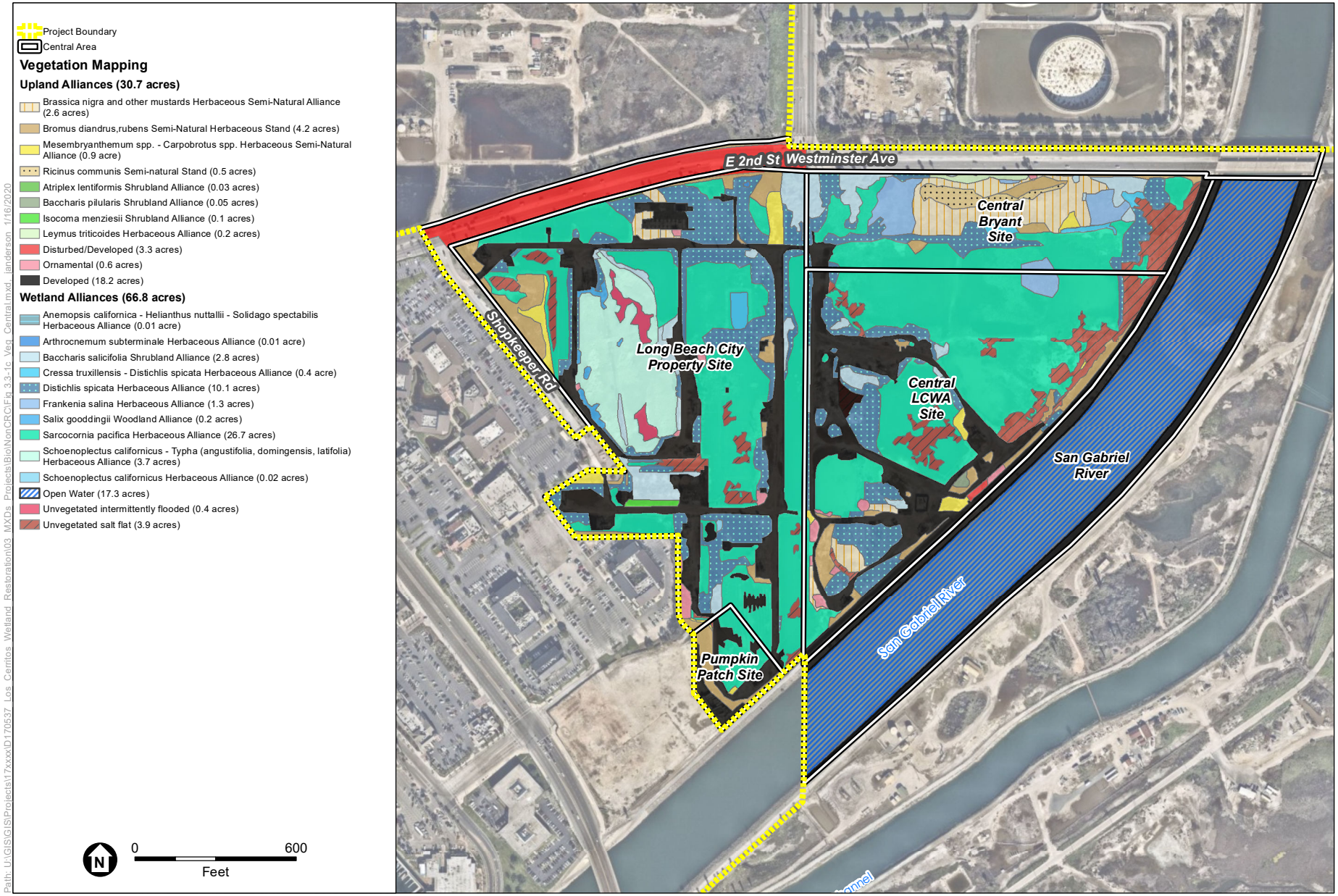
Figure 3.3-1b
Vegetation Communities
Isthmus Area

ESA



SOURCE: Mapbox, LCWA, CRC, Glenn Lukos Associates

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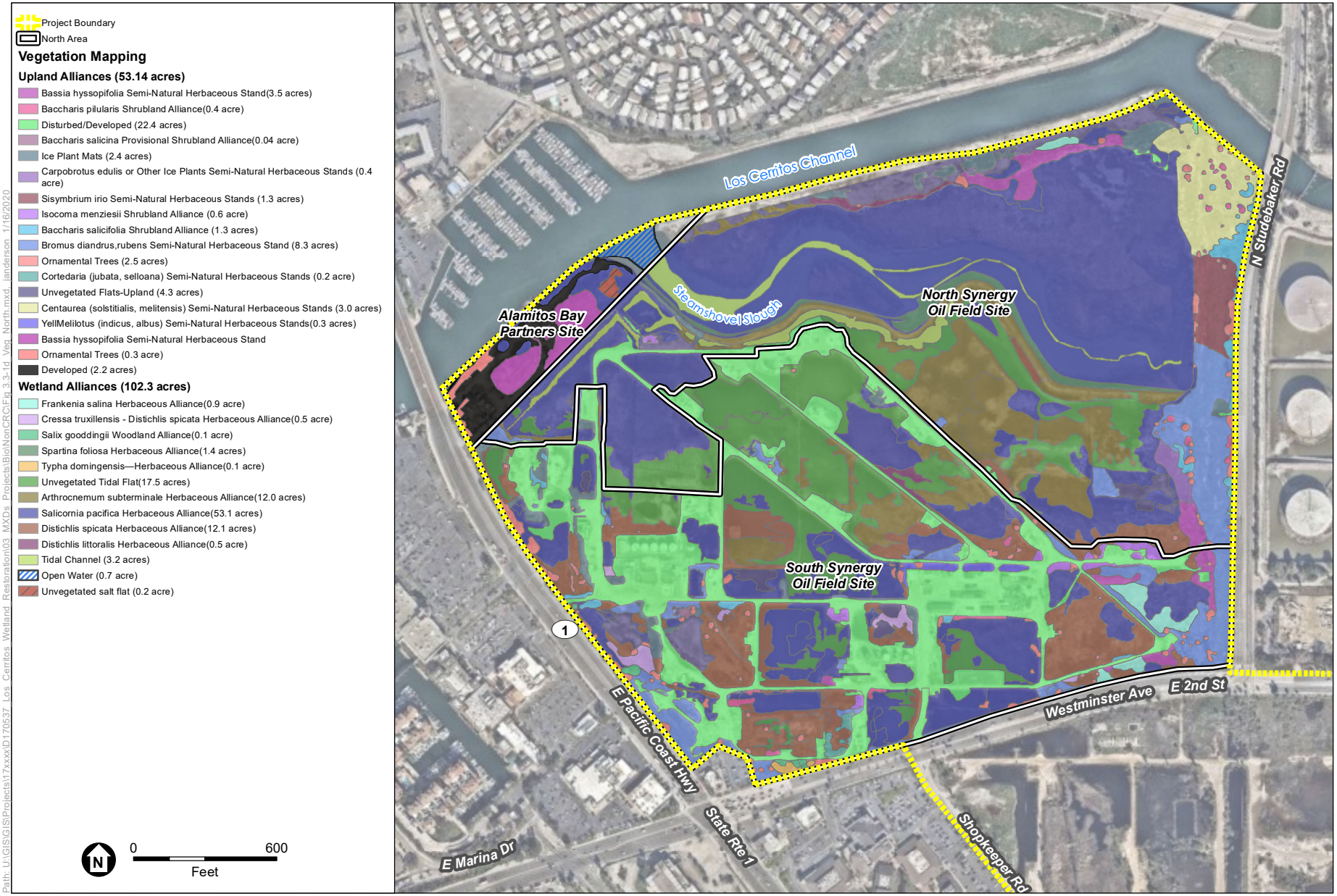
Figure 3.3-1c
Vegetation Communities
Central Area

ESA



SOURCE: Mapbox, LCWA, CRC, Glenn Lukos Associates

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Figure 3.3-1d
Vegetation Communities
North Area

ESA

***Baccharis salicina* Provisional Shrubland Alliance (Emory's baccharis thickets) (S3).** Occurs in disturbed areas with an open canopy of Emory's baccharis (*Baccharis salicina*)[3] with a mix of saltgrass (*Distichlis spicata*) and small-flowered ice plant (*Mesembryanthemum nodiflorum*) in the understory.

***Bassia hyssopifolia* Semi-Natural Herbaceous Stand (SNR).** Five-horn smotherweed (*Bassia hyssopifolia*) is a non-native annual species that occurs on disturbed, often saline, soils. In the program area, stands consist of locally dense thickets, typically in disturbed saline soil conditions. This species is also a common weed as understory in other associations. [The MCV II does not have a description for this alliance, it was used here for consistency with City of Long Beach (2017) mapping.]

***Brassica nigra* and Other Mustards Herbaceous Semi-Natural Alliance (SNR).** This alliance includes herbaceous vegetation dominated by various non-native mustards, mostly annual and biennial species, including *Brassica nigra, Hirschfeldia incana*, or *Raphanus sativus*. Most of these species are invasive exotics. Native shrubs may be present but only at low relative and absolute cover. The non-native herbs clearly dominate the landscape. This alliance occurs primarily on soils with a history of disturbance.

***Bromus diandrus, rubens* Semi-Natural Herbaceous Stand (SNR).** Non-native annual upland grasses in the genera *Bromus* (bromes) and *Avena* (wild oats) dominate these areas. They are typically upland areas that have a history of soil disturbance. Dominant species include red brome (*Bromus madritensis*), rip gut brome (*Bromus diandrus*), slender wild oats (*Avena barbata*), smilo grass (*Stipa miliacea* var. *miliacea*), as well as locally dense patches of non-native forbs including small-flowered ice plant, five-horn smotherweed, Australian saltbush (*Atriplex semibaccata*), tocalote (*Centaurea melitensis*), London rocket (*Sisymbrium irio*), and summer mustard (*Hirschfeldia incana*). [Note that two categories of MCV II "brome grasslands" have been combined for simplification.]

***Carpobrotus edulis* or Other Ice Plants Semi-Natural Herbaceous Stands (Ice Plant Mats) (SNR).** Common as small patches throughout the program area. This alliance is dominated by non-native small-flowered ice plant (*Mesembryanthemum nodiflorum*) and occasionally by crystalline ice plant (*Mesembryanthemum crystallinum*). Pickleweed may occur in low quantities.

***Centaurea (solstitialis, melitensis)* Semi-Natural Herbaceous Stands (Yellow Star Thistle Fields) (SNR).** Limited occurrences within the program area. This alliance is dominated by tocalote (*Centaurea melitensis*).

***Conium maculatum – Foeniculum vulgare* Herbaceous Semi-Natural Alliance (SNR).** Poison hemlock (*Conium maculatum*) is a biannual invasive exotic species that is dominant (or co-dominant with other non-native plants) in the herbaceous layer. This alliance occurs in uplands on disturbed soil. Other species include a wide variety of annual non-native grasses and annual mustards (*Brassica* spp.).

[3] The 2012 Jepson Manual (Baldwin et al. 2012, 256) now lists this taxon as Baccharis salicina.

***Cortedaria (jubata, selloana)* Semi-Natural Herbaceous Stands (Pampas Grass Patches) (SNR).** Limited occurrences within the program area. Dominated by mostly monotypic stands of pampas grass (*Cortedaria selloana*).

Developed (SNR). Buildings, concrete pads, infrastructure, roads, sidewalks, parking areas, other pavement, constructed drainage and erosion control structures, barriers, berms, sumps, and levees.

Disturbed/Developed (SNR). Most often associated with areas disturbed by historic oil operations, including existing roads, existing and former oil well sites and other types of infrastructure. Many of these areas are bare or sparsely vegetated whereas others are covered by gravels or asphalt-like material (ALM). Vegetation is comprised mostly of non-native with species such as small flowered ice plant, five-horn smotherweed, tocalote (*Centaurea melitensis*) and non-native grasses (*Bromus* spp.).

Habitat Mitigation/Restoration Site (SNR). These areas are the subject of ongoing management as restoration or mitigation sites. The vegetation includes various upland and wetland herbs, shrubs and trees. Non-native species are being managed by weeding. Irrigation may be ongoing.

***Isocoma menziesii* Shrubland Alliance (S3).** Menzie's goldenbush (*Isocoma menziesii*) is an upland shrub that is found in transition zone habitats around salt marshes, on coastal bluffs, and in coastal sage scrub. It is tolerant of occasional flooding and tolerates higher salinity than most upland shrubs. It is a good colonist on disturbed soils, and is often found with a non-native understory that includes small-flowered ice plant and non-native grasses.

***Leymus cinereus* – *Leymus triticoides* Herbaceous Alliance (S3).** Alkali rye grass (*Leymus triticoides*) is a rhizomatous perennial grass that typically occurs on saline or alkaline soils with a shallow water table. It forms nearly monotypic stands.

Managed (SNR). These areas are the subject of ongoing management as part of the operation of the Los Alamitos Retarding Basin. The vegetation includes various upland and wetland herbs and shrubs.

***Melilotus (indicus, albus)* Semi-Natural Herbaceous Stands (Sweet Clover Fields) (SNR).** This alliance is dominated by yellow sweet clover (*Melilotus indicus*) and also includes non-native grasses.

***Mesembryanthemum* spp. – *Carpobrotus* spp. Herbaceous Semi-Natural Alliance (SNR).** Non-native annual iceplant species (*Mesembryanthemum* spp.) occur in wetland and upland areas typically on disturbed, saline soils. Perennial iceplant species (*Carpobrotus* spp.) form large mats in uplands in the program area. Where this alliance is dominated by small-flowered ice plant (*Mesembryanthemum nodiflorum*) and/or crystalline ice plant (*Mesembryanthemum crystallinum*) other species are very sparse or absent. Where sea fig (*Carpobrotus edulis*) is the dominant, it co-occurs with annual grasses.

Ornamental Trees (SNR). The site supports scattered areas of non-native invasive trees. The diversity of non-native trees scattered across the site is substantially higher than captured by any MCV II alliance, so these trees were mapped as "Ornamental Trees". These include a range of non-native trees, including myoporum (*Myoporum laetum*), Canary Island palm (*Phoenix canariensis*), Mexican fan palm (*Washingtonia robusta*), Shamel ash (*Fraxinus uhdei*), bluegum eucalyptus (*Eucalyptus globulus*), Sydney golden wattle (*Acacia longifolia*), and Brazilian pepper (*Schinus terebinthifolius*). Some of these have various annual non-natives as understory species.

***Peritoma arborea* Shrub Stand (S4).** Bladderpod (*Peritoma arborea*) is a native woody shrub that is growing with non-native mustards and annual grasses on disturbed upland soils.

***Ricinus communis* Semi-Natural Stand (SNR).** Castor bean (*Ricinus communis*) is a large invasive non-native woody shrub that occurs primarily on disturbed upland soils. It grows with tree tobacco (*Nicotiana glauca*) and non-native annual grasses (*Avena* and *Bromus* spp.).

Ruderal (SNR). Ruderal areas are dominated by telegraph weed (*Heterotheca grandiflora*). Telegraph weed is a native annual or short-lived perennial herbaceous species that grows on disturbed upland soils. It grows on site in low densities on sandy soils (likely dredge material as mollusk shells characteristic of salt marsh and beach habitats are common on the soil surface). It grows with scattered annual grasses, heron's bill (*Erodium* spp.) and Lewis' evening primrose.

***Sisymbrium irio* Semi-Natural Herbaceous Stands (SNR).** Occurs at a single location at the southeast corner of the northern area, consisting of a near monoculture of the non-native London rocket (*Sisymbrium irio*). This alliance intergrades with tocalote fields to the north and non-native grasses to the south.

Unvegetated Flats (Upland) (SNR). Consist of areas with less than 5 percent vegetative cover. Unvegetated Flats (Upland) are distinguished from Unvegetated Salt Flat and Unvegetated Tidal Flat, which at a minimum exhibit either wetland hydrology or hydric soils and, therefore, meet the CCA definition of wetlands. The lack of wetland hydrology was determined through direct observations in the field during data collection associated with the jurisdictional assessment or through review of historic aerial photographs for ponding.

Wetland Alliances and Land-Cover Types

***Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance (S2).** Yerba mansa (*Anemopsis californica*) occurs in low-salinity soils that are moist more or less year-round, possibly associated with seeps or urban runoff. Yerba mansa occurs as a nearly-monotypic stand.

***Arthrocnemum subterminale* Herbaceous Alliance (S2).** Parish's glasswort (*Arthrocnemum subterminale*) is a plant that is most common in high marsh areas with seasonally hypersaline soils. This species often forms monocultures. Other species that are sometimes associated with it include common pickleweed, alkali heath (*Frankenia salina*), saltgrass (*Distichlis spicata*), shoregrass (*Distichlis littoralis*), and sea lavender (*Limonium californicum*).

***Baccharis salicifolia* Shrubland Alliance (S4).** Mulefat (*Baccharis salicifolia*) is a large evergreen shrub that occurs along creeks and rivers, in and adjacent to freshwater wetlands, and in uplands. Most of the mulefat at the site occurs in small to medium patches, often in areas that receive runoff from developed areas. This alliance consists of generally small thickets of mulefat with understory that varies from location to location but may include one or more of the following species: saltgrass (*Distichlis spicata*), seaside heliotrope (*Heliotropium curassivicum*), small-flowered ice plant (*Mesembryanthemum nodiflorum*), five-horn smotherweed (*Bassia hyssopifolia*), and non-native upland grasses.

***Cressa truxillensis – Distichlis spicata* Herbaceous Alliance (S2).** Alkali weed (*Cressa truxillensis*) is a native perennial herbaceous plant that occurs in salt-affected seasonal wetlands, high marsh and transition zone habitats, and occasionally in uplands at the site. Other species that co-occur with alkali weed at the site include saltgrass, non-native annual grasses, and alkali heath.

***Distichlis littoralis* Herbaceous Alliance (SNR).** Like Parish's glasswort, shoregrass is a species most common in high marsh areas and is common in areas above tidal influence such as on the berm that demarcates the limits of Steamshovel Slough. This species is also a common component of the pickleweed mat alliance described below, and most of the shoregrass on the site is included in the pickleweed mat and/or Parish's glasswort alliances.

***Distichlis spicata* Herbaceous Alliance (S4).** Saltgrass is a perennial rhizomatous grass that occurs in salt-affected seasonal wetlands, high marsh and transition zone habitats, and occasionally in uplands at the site. Saltgrass is common in a variety of alliances throughout the site, though it dominates in these areas. Other species commonly associated with this alliance include common pickleweed, alkali heath, non-native annual grasses, alkali weed, small-flowered ice plant, and five-horn smotherweed.

***Frankenia salina* Herbaceous Alliance (S3).** Alkali heath is a low-growing, woody, rhizomatous halophyte that occurs in salt-affected seasonal wetlands, high marsh and transition zone habitats, and occasionally in uplands at the site. It is common in a variety of alliances at the site but occasionally forms unbroken stands that constitute a separate alliance. Other species commonly found in this alliance include saltgrass, common pickleweed, alkali weed, and non-native annual grasses.

Open Water (SNR). These areas are permanently flooded tidal areas. They may support patches of rooted eelgrass (*Zostera* spp.), however this species was not mapped in this effort.

***Salicornia pacifica* Herbaceous Alliance (S3).** Common pickleweed is an herbaceous perennial native wetland species that occurs in tidal salt marshes and salt-affected seasonal wetlands. It is the most common wetland alliance in the program area. Other common species that co-occur with common pickleweed include alkali heath, Parish's glasswort, saltgrass, sea lavender, alkali weed, alkali weed, saltwort (*Batis maritima*), fleshy jaumea (*Jaumea carnosa*) and estuary seablite (*Sueada esteroa*).

***Salix gooddingii* Woodland Alliance (S3).** Black willow (*Salix gooddingii*) is dominant and in many cases consists of a single large tree that was of sufficient size to be included as a mapping unit. The understory varies substantially throughout the site but may include one or more of the following species: saltgrass, tall nutsedge (*Cyperus eragrostis*), seaside heliotrope, alkali weed (*Cressa truxillensis*), and curly dock.

***Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance (S3).** California bulrush (*Schoenoplectus californicus*) grows with cattails (*Typha* spp.) in seasonally flooded or saturated brackish or freshwater wetlands. It grows with trees such as black willow (*Salix gooddingii*) and herbaceous species such as curly dock in basins that are augmented by artificial dry season inflows.

***Schoenoplectus californicus* Herbaceous Alliance (S3).** California bulrush is a large perennial grass-like herb that occurs along freshwater water sources in wetlands. This alliance occurs in a small patch, in an area that receives runoff from developed areas. This alliance consists of generally small, monotypic thickets of California bulrush with little to no understory or other dominant species.

***Spartina foliosa* Herbaceous Alliance (S3.2).** Within Steamshovel Slough. Cordgrass (*Spartina foliosa*) is dominant with other species including common pickleweed and saltwort.

Tidal Channels (Tidal) (SNR). Tidal channels are found within Steamshovel Slough and in the area south of the berm, all of which is included in the northern portion of the north area.

***Typha domingensis* Herbaceous Alliance (S5).** Consists of non-tidal freshwater marsh dominated by southern cattail (*Typha domingensis*). Other species include tall nutsedge, alkali bulrush (*Bolboschoenus maritimus*), and California bulrush (*Schoenoplectus californicus*).

***Ulva lactuca* Algal Mat (SNR).** This cover class represents areas of low elevation mudflat and tidal channel that have moderate to high cover of algal mats. The mats may occur seasonally or intermittently and may be associated with poor water quality (i.e., high nutrient loads). The MCV II does not have a description for this alliance.

Unvegetated Salt Flat (SNR). This habitat type occurs in non-tidal areas that do not have vegetation. The lack of vegetation is likely due to hypersalinity of soils. High soil salinity may be from very rare or historic tidal inundation or as a legacy (i.e., soil dredged from tidal or sub-tidal habitats and placed on site).

Unvegetated Tidal Flat (SNR). This habitat type occurs in tidal areas that do not have emergent vegetation. The lack of vegetation may be due to more or less constant ponding of water (shallow depressions on the marsh plain). They may support algae seasonally, although algal mats were not observed during mapping.

3.3.2.4 Special-Status Plants

Special-status plants are legally protected under the California Endangered Species Act (CESA) (Fish and Game Code Sections 2050 et seq.), the Native Plant Protection Act (Fish and Game Code Sections 1900 et seq.), the federal Endangered Species Act (FESA), other regulations, or considered sufficiently rare by the scientific community to qualify for such a listing (CDFW 2019b). For purposes of this PEIR, special-status plant species include the following categories:

1. Officially listed by California or the federal government as endangered, threatened, or rare;
2. A candidate for state or federal listing as endangered, threatened, or rare;
3. Taxa that meet the criteria for listing, even if not currently included on any list, as described in *CEQA Guidelines* 15380; and
4. Taxa listed in the CNPS Inventory of Rare and Endangered Plants of California with a California Rare Plant Rank (CRPR) of 1, 2, 3 or 4.

Table 3.3-2, *Special-Status Plants with Potential to Occur*, provides a summary of the special-status plants determined to have potential to occur for the proposed program based on the results of the CNDDB (2019) and CNPS (2019) queries. Also included in Table 3.3-2 are other special-status plants that are known to occur within the vicinity where suitable habitat is present (in the proposed program area). A table providing a summary of those special-status plants determined to be unlikely to occur and therefore were not analyzed further is included in Appendix C3. Following the table, additional discussions are provided for any special-status plants observed on site or for which potentially suitable habitat occurs on the site.

The "Potential for Occurrence" category indicated in Table 3.3-2 is defined as follows:

- *Unlikely:* The program area and/or immediate area do not support suitable habitat for a particular species, and therefore the proposed program is unlikely to impact this species.
- *Low Potential:* The program area and/or immediate vicinity provides low-quality habitat for a particular species, such as improper substrate, disturbed or otherwise degraded habitat, or improper assemblage of desired vegetation, and/or the site is outside of the known range of the species.
- *Moderate Potential:* The program area and/or immediate vicinity provides marginal habitat for a particular species. For example, proper substrate may be present, but the desired vegetation assemblage or density is less than ideal, or substrate and vegetation are suitable, but the site is outside of the known elevation range of the species.
- *High Potential:* The program area and/or immediate vicinity provides high-quality or ideal habitat (i.e., soils, vegetation assemblage, and topography) for a particular species and/or there are known occurrences in the general vicinity of the program area.
- *Present:* Species observed on the site during focused surveys or other site visits.

TABLE 3.3-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Aphanisma *Aphanisma blitoides*	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils.	Low. Suitable habitat present in South, North and Isthmus Areas; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CRPR: 1B.1	Coastal bluff scrub, coastal dunes, coastal scrub. On bluffs and slopes near the ocean in sandy or clay soils.	Low. Suitable habitat present in South, North and Isthmus Areas; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
California box-thorn *Lycium californicum*	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, coastal scrub.	Present. Documented in South Area, occurs in coastal scrub present. Individuals planted at Zedler Marsh in the Isthmus Area. Suitable habitat present in North Area; however, not documented during focused surveys conducted in the North and Central Areas by Glenn Lukos.
California Orcutt grass *Orcuttia californica*	Federal: FE State: SE CRPR: 1B.1	Vernal pools.	Unlikely. Not documented in the program area including during focused surveys conducted in the North and Central Areas by Glenn Lukos, no suitable habitat present.
Catalina mariposa-lily *Calochortus catalinae*	Federal: None State: None CRPR: 4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush.	Low. Suitable habitat present in South, North and Isthmus Areas; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Chaparral sand verbena *Abronia villosa* var. *aurita*	Federal: None State: None CRPR: 1B.1	Sandy soils in chaparral, coastal sage scrub.	Low. Suitable habitat present; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	Federal: None State: None CRPR: 1B.2	Coastal dunes.	Low. Suitable habitat present in South and North Areas; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CRPR:1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Present. Several populations of this species were identified in spring 2011 by Tidal Influence botanists and in 2009 and 2010 by Glen Lukos within the South Area. Individuals were not documented in 2018 during focused surveys conducted for the species by CRC. Suitable habitat present in all four sites within the program area.

TABLE 3.3-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	Federal: None State: None CRPR: 1B.2	Alkaline soils in coastal sage scrub, coastal bluff scrub.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	Federal: None State: None CRPR: 1B.2	Chaparral, coastal scrub (sandy, often in disturbed areas).	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Engelmann oak *Quercus engelmannii*	Federal: None State: None CRPR: 4.2	Cismontane woodland, chaparral, riparian woodland, valley and foothill grassland.	Unlikely. Not documented on site, no suitable habitat present.
Estuary seablite *Suaeda esteroa*	Federal: None State: None CRPR: 1B.2	Coastal salt marsh and swamps. Occurs in sandy soils.	Present. Documented on site in tidal salt marsh areas primarily in North Area (Steamshovel Slough). Introduced to Zedler Marsh in the Isthmus Area. Suitable habitat present in South and Central Areas.
Gambel's water cress *Rorippa gambelii*	Federal: FE State: ST CRPR: 1B.1	Marshes and swamps.	Unlikely. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos, no suitable habitat present.
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CRPR: 1B.2	Coastal scrub, chaparral, valley and foothill grassland. Dry, rocky calcareous slopes and rock outcrops.	Low. Suitable habitat present at all four sites; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Laguna Beach dudleya *Dudleya stolonifera*	Federal: FT State: ST CRPR: 1B.1	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. In thin soil on north-facing sandstone cliffs.	Unlikely. Not documented on site, no suitable habitat present.
Lewis' evening primrose *Camissoniopsis lewisii*	Federal: None State: None CRPR: 3	Occurs in coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, and valley and foothill grassland in sandy or clay soil up to 985 feet in elevation.	Present. Observations limited to South Area in 2018 by CRC and 2011 by Tidal Influence. Suitable habitat present in Isthmus, Central and North Areas.

TABLE 3.3-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	Federal: None State: None CRPR: 1A	Salt and freshwater marshes, historically in Los Angeles, Orange, Riverside and San Bernardino Counties. Still Presumed to be extinct. Plant discovered in Santa Clarita most likely hybrid between *H. nuttallii* and *H. californicus*.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Still presumed to be extinct.
Lucky morning-glory *Calystegia felix*	Federal: None State: None CRPR: 1B.1	Meadows and seeps, riparian scrub. Sometimes alkaline, alluvial.	Unlikely. Not documented on site, no suitable habitat present.
Lyon's pentachaeta *Pentachaeta lyonii*	Federal: FE State: SE CRPR: 1B.1	Chaparral (openings), coastal sage scrub, valley and foothill grassland.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CRPR: 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the Program Area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Mud nama *Nama stenocarpum*	Federal: None State: None CRPR: 2B.2	Vernal pools and freshwater seasonal ponds.	Low. Suitable habitat present in the South, Central and North Areas; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CRPR: 1B.1	Chenopod scrub, playas, vernal pools.	Unlikely. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos, no suitable habitat present.
Parish's gooseberry *Ribes divaricatum* var. *parishii*	Federal: None State: None CRPR: 1A	Riparian woodland. Salix swales in riparian habitats.	Unlikely. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos, no suitable habitat present.
Plummer's mariposa-lily *Calochortus plummerae*	Federal: None State: None CRPR: 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire.	Low. Suitable habitat present at all four sites; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.

TABLE 3.3-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Prostrate navarretia *Navarretia prostrata*	Federal: FSC State: None CRPR: 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Red sand-verbena *Abronia maritima*	Federal: None State: None CRPR: 4.2	Marshes and swamps, coastal dunes. Limited to the higher zones of salt marsh habitat.	Moderate. Not documented on site, suitable habitat present in all four areas.
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	Federal: FE State: SE CRPR:1B.2	Coastal dune, coastal salt marshes and swamps.	Moderate. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos, suitable habitat present in all four areas.
Salt spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CRPR: 1B.2	Occurs in alkali sinks and coastal sage scrub up to 4500 feet in elevation.	Low. Suitable habitat present at all four sites; however, only one documented collection occurs from 1935 in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CRPR:1B.2	Meadows and seeps, marshes and swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas.	Unlikely. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos, no suitable habitat present.
San Diego button-celery *Eryngium aristulatum* var. *parishii*	Federal: FE State: SE CRPR:1B.1	Vernal pools, coastal scrub, valley and foothill grassland. San Diego mesa hardpan & claypan vernal pools & southern interior basalt flow vernal pools; usually surrounded by scrub.	Unlikely. Not documented on site, no suitable habitat present.
Sanford's arrowhead *Sagittaria sanfordii*	Federal: None State: None CRPR: 1B.2	Marshes and swamps.	Unlikely. Not documented on site including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. No potential to occur on site due to lack of suitable habitat and site is outside of historic range (i.e., no records in Los Angeles County).
Small-flowered morning-glory *Convolvulus simulans*	Federal: None State: None CRPR: 4.2	Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges.	Low. Suitable habitat present at all four sites; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
South Coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	Federal: None State: None CRPR: 3.2	Chaparral, coastal scrub, coastal dunes, coastal salt marsh. Sandy, sometimes rocky sites.	Low. Suitable habitat present at all four sites; however, not documented in the program area. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.

TABLE 3.3-2
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
South coast saltscale *Atriplex pacifica*	Federal: None State: None CRPR: 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, playas.	Low. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Southern California black walnut *Juglans californica*	Federal: None State: None CRPR: 4.2	Chaparral, coastal scrub, cismontane woodland, riparian woodland. Slopes, canyons, alluvial habitats.	Unlikely. Not documented on site, no suitable habitat present.
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CRPR: 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Present. Occurs in a variety of locations in all four areas as observed by CRC in 2018, Tidal Influence in 2011 and Glen Lukos in 2011, 2013, 2015 and 2016.
Southwestern spiny rush *Juncus acutus* ssp. *Leopoldii*	Federal: None State: None CRPR: 4.2	Mesic coastal dunes, alkaline meadows and seeps, coastal salt marshes and swamps.	Present. Naturally occurring in Isthmus Area and individuals were planted at Zedler Marsh in the Isthmus Area. Not observed during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos Suitable habitat present in South, Central and North Areas.
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	Federal: FE State: SE CNPS: List 1B.1	Coastal salt marsh. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs.	Moderate. Suitable habitat present at all four sites; however, not documented in the program area including during focused botanical surveys conducted in the North and Central Areas by Glenn Lukos. Abundance of suitable habitat within the program area.
Vernal barley *Hordeum intercedens*	Federal: None State: None CRPR: 3.2	Valley and foothill grassland, vernal pools, coastal dunes, coastal scrub. Vernal pools, dry, saline streambeds, alkaline flats.	~~Low~~Present. Suitable habitat present at all four sites; however, not formally documented in the program area. Cooper and Hamilton (2015) report species within on-site alkali meadow habitat. Suitable habitat is limited within the program area and either contains non-native plant species or is adjacent to non-native dominated communities and land covers.
Woolly seablite *Suaeda taxifolia*	Federal: None State: None CRPR: 4.2	Coastal bluff scrub, coastal dunes, margins of coastal salt marshes and swamps.	Present. Documented in North Area (Steamshovel Slough) and previously planted at Zedler Marsh in the Isthmus Area. Suitable habitat present in the South and Central Area.

SOURCES: Glenn Lukos Associates Inc., 2017a; Coastal Restoration Consultants, 2019; CNDDB, 2019; Tidal Influence, 2012.

STATUS CODES:

Federal
FE = Federally Endangered
FT = Federally Threatened

State
SE = State Endangered
ST = State Threatened

California Rare Plant Rank (CRPR)
CRPR 1A = Plants presumed extinct in California;
CRPR 1B = Plants considered rare, threatened or endangered in California and elsewhere;
CRPR 2 = Plants considered rare, threatened or endangered in California, more common elsewhere;
CRPR 4 = Limited distribution, watch list.
CRPR Threat Ranks:
0.1 Seriously threatened in California (over 80 percent of occurrences threatened / high degree and immediacy of threat)
0.2 Fairly threatened in California (20–80 percent occurrences threatened / moderate degree and immediacy of threat)
0.3 Not very threatened in California (<20 percent of occurrences threatened / low degree and immediacy of threat or no current threats known)

Special-Status Plants Documented

Special-status plants detected during focused surveys are depicted in **Figure 3.3-2a**, *Special-Status Plants – South Area*, through **Figure 3.3-2d**, *Special-Status Plants – North Area*. The following special-status plants have been documented as occurring within at least one of the four areas. **Table 3.3-3**, *Flowering Periods of Special-Status Plants with Potential to Occur*, provides a summary of the flowering periods for each of the special-status plants documented on site as well as those with potential to occur.

California Box-thorn (Lycium californicum)

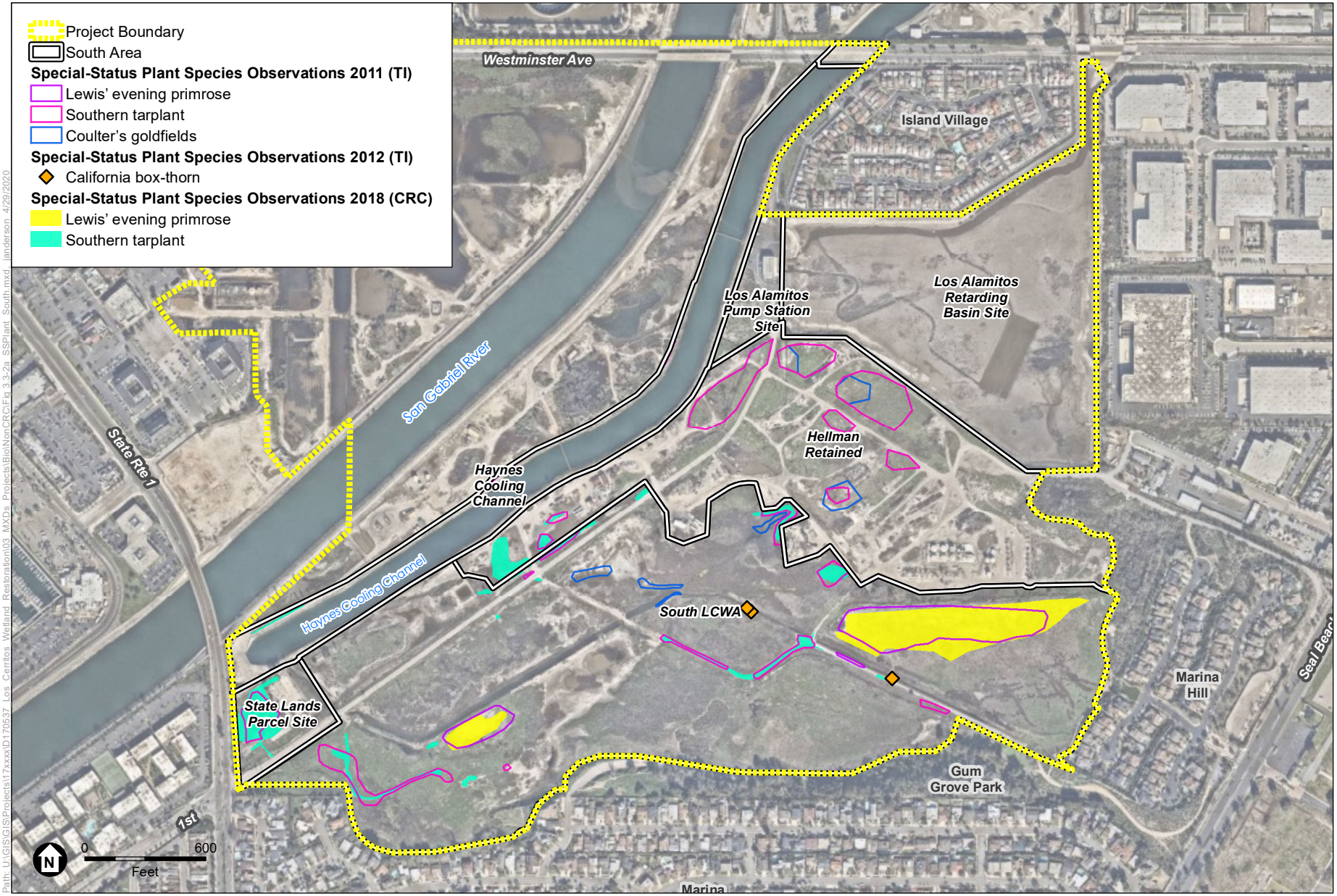
California box-thorn is a perennial shrub designated as a CRPR 1B.1 that is known from Los Angeles, Orange and San Diego counties, as well as Santa Catalina Island. California box-thorn occur in coastal sage scrub. The flowering period occurs from May to August. This species was detected in the South Area in 2011 and individuals were planted within the Isthmus Area. Focused surveys targeting the species were limited to the North and Central Areas where it was not detected. Suitable habitat for the species also occurs within the Central and North Areas; however, none were observed in 2018.

Coulter's Goldfields (Lasthenia glabrata ssp. coulteri)

Coulter's goldfields are an annual herb designated as a CRPR 1B.1 that is known from Kern, Santa Barbara, Ventura, Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Coulter's goldfields occur in coastal salt marshes and freshwater marshes, playas and vernal pools. The flowering period occurs from February to June. This species was detected in the South Area in 2011 although none were observed in 2018. Focused surveys targeting the species were conducted in all four areas. Suitable habitat for the species also occurs within the Isthmus, Central and North Areas.

*Estuary Seablite (*Suaeda esteroa*)*

Estuary seablite is a perennial shrub designated as a CRPR 1B.2 that is known from Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties as well as from Baja California. Estuary seablite occurs in mid- to upper zones of coastal salt marshes. The flowering period occurs from May to October. This species was detected on the North Area (Synergy Oil Field site), where it occurs primarily within Steamshovel Slough and is most common in the mid- to upper-marsh areas growing on berms and slopes. It also occurs in the tidal areas immediately south of the berm that separates the Steamshovel Slough from the areas to the south and within the Isthmus Area (Zedler Marsh). Approximately 650 individuals were detected. Suitable habitat for the species also occurs within the Isthmus, Central, and North Areas. Focused surveys targeting the species were limited to the North and Central Areas.

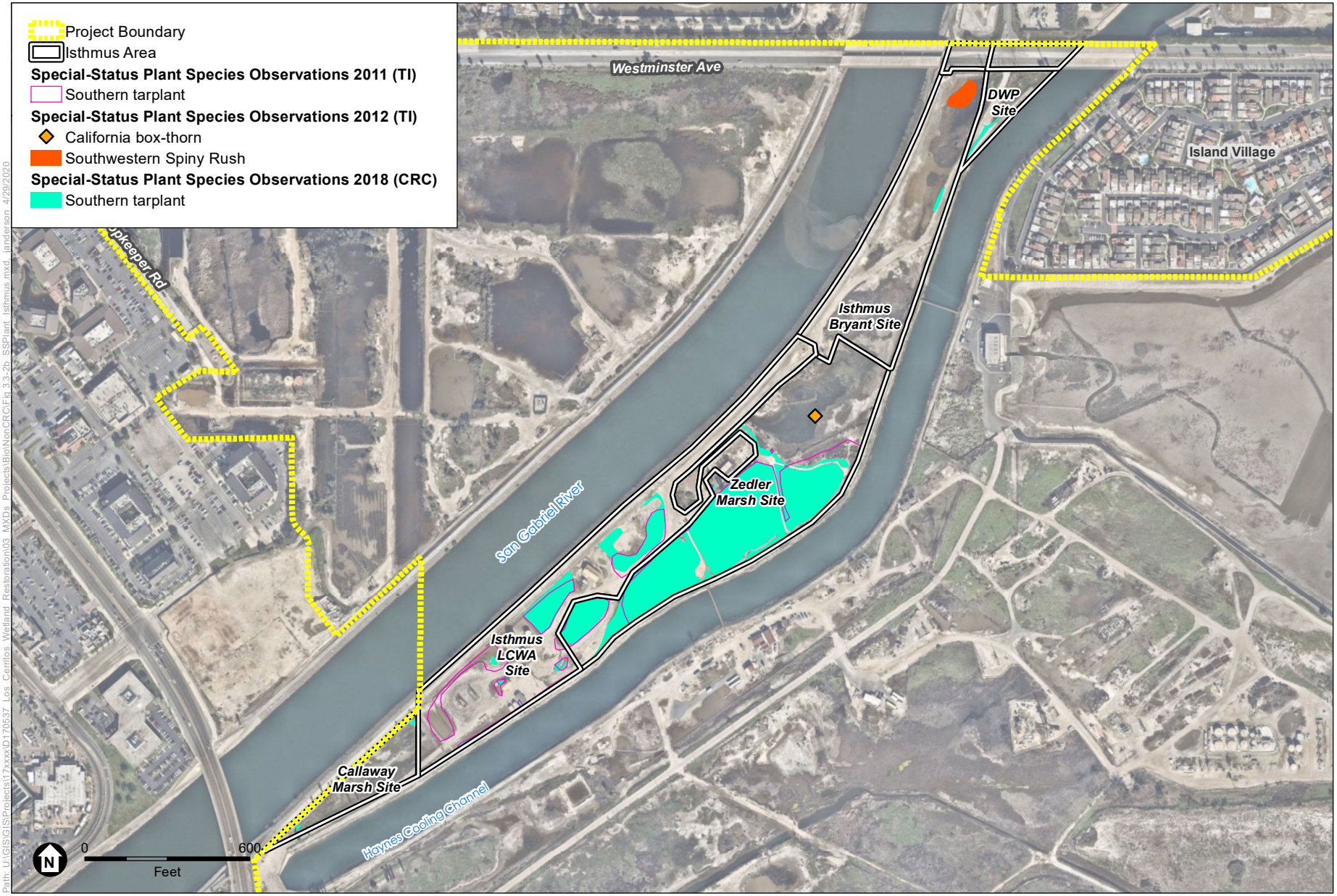


SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Tidal Influence

Los Cerritos Wetlands Restoration Plan Draft Program EIR

Figure 3.3-2a
Special-Status Plants
South Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Tidal Influence

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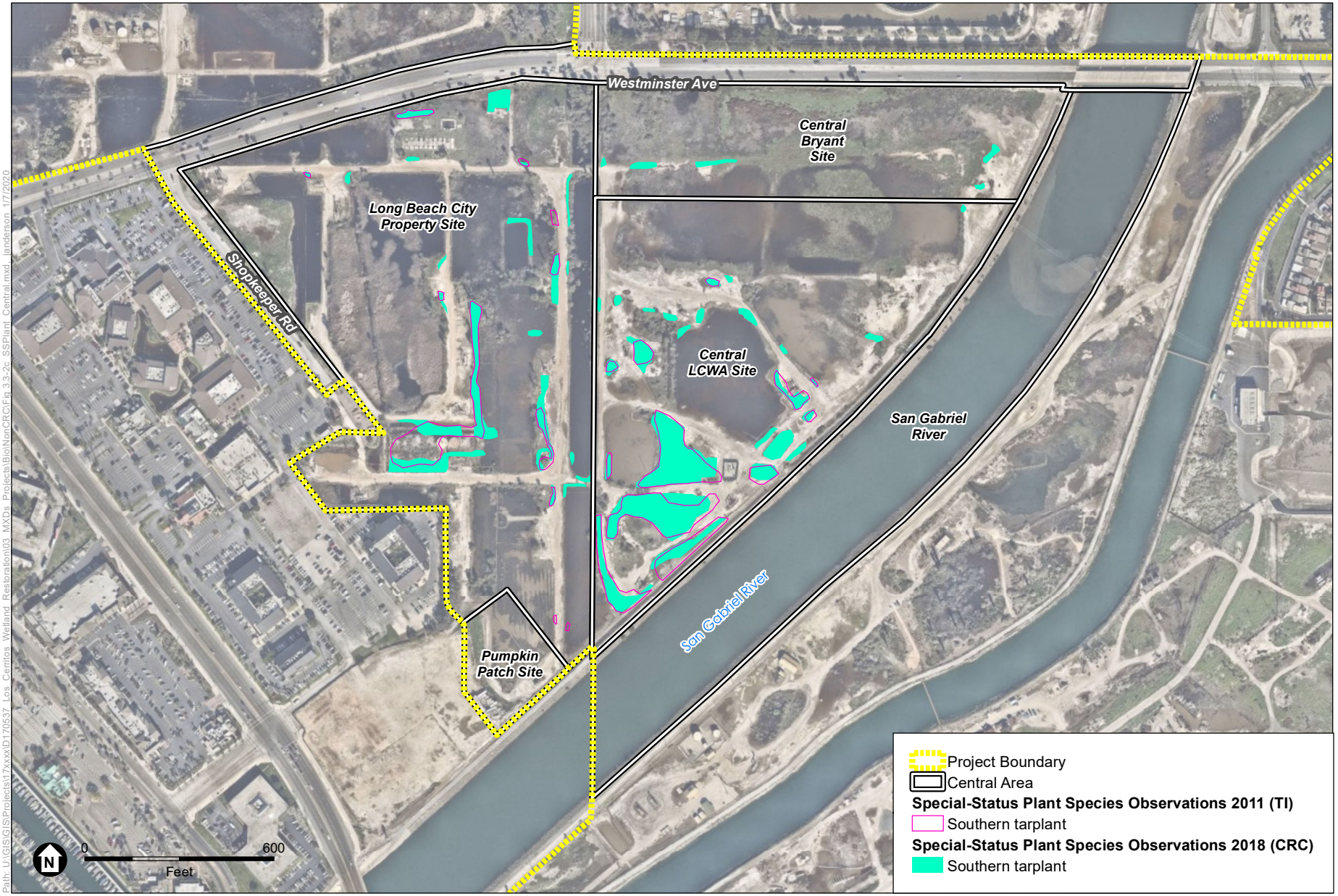
Figure 3.3-2b
Special-Status Plants
Isthmus Area

ESA



Path: U:\GIS\GIS\Projects\17xxxx\D170537_Los_Cerritos_Wetland_Restoration\03_MXDs_Projects\Bio\NonCRC\Fig 3.3-2c_SSPlant_Central.mxd, janderson 1/7/2020

SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Tidal Influence, Glenn Lukos Associates

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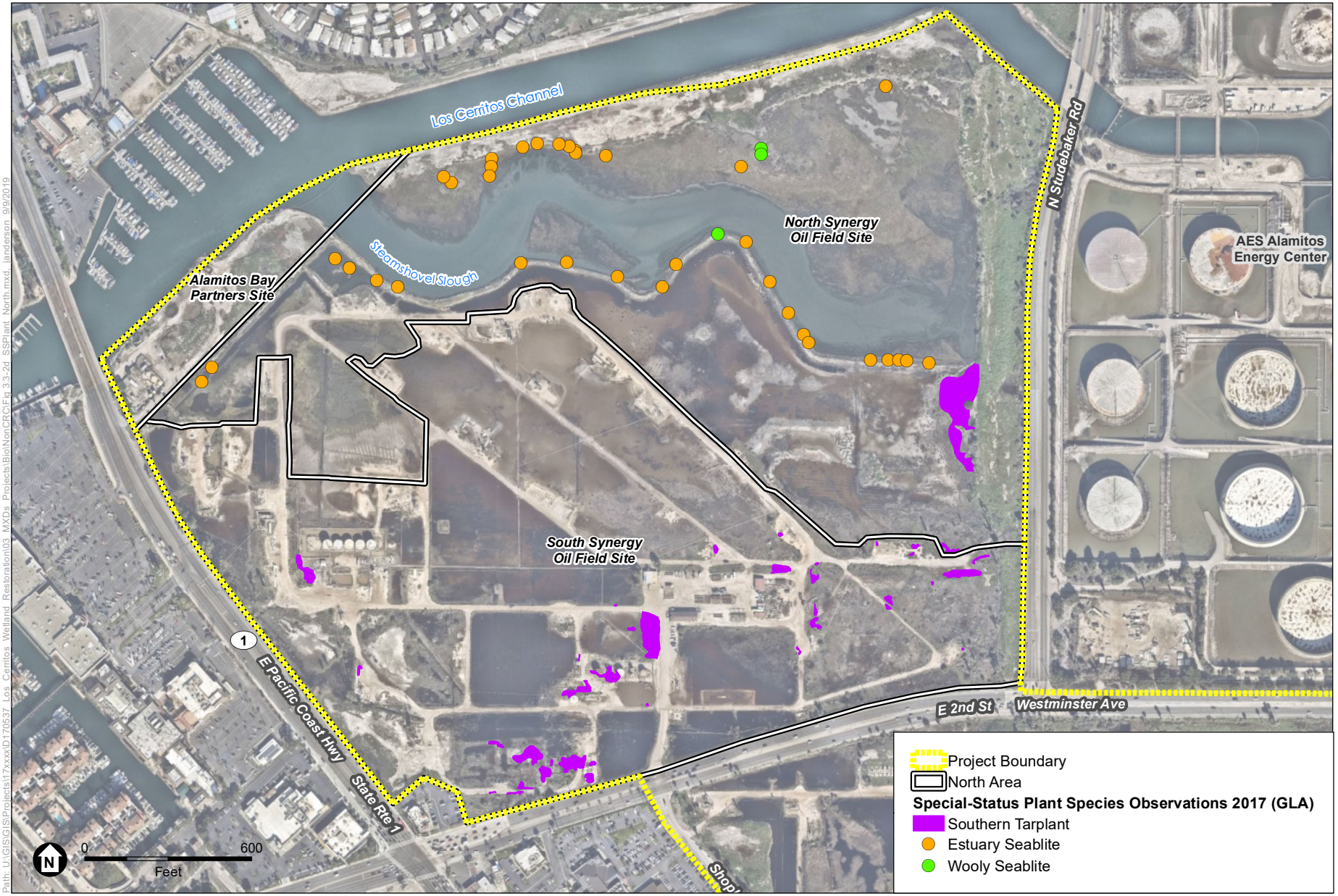
Figure 3.3-2c
Special-Status Plants
Central Area

ESA



SOURCE: Mapbox, LCWA, Glenn Lukos Associates

Los Cerritos Wetlands Restoration Plan Draft Program EIR

Figure 3.3-2d
Special-Status Plants
North Area

ESA

TABLE 3.3-3
FLOWERING PERIODS OF SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Flowering Period
Aphanisma *Aphanisma blitoides*	March to June
Brand's star phacelia *Phacelia stellaris*	March to June
California box-thorn *Lycium californicum*	May to August
Catalina mariposa-lily *Calochortus catalinae*	March to June
Chaparral sand verbena *Abronia villosa* var. *aurita*	January to September
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	April to September
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	February to June
Coulter's saltbush *Atriplex coulteri*	May to October
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	May to October
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	April to November
Estuary seablite *Suaeda esteroa*	May to October
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	May to July
Lewis' evening primrose *Camissonionsis lewisii*	May to June
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	August to October
Lyon's pentachaeta *Pentachaeta lyonii*	March to August
Many-stemmed dudleyad *Dudleya multicaulis*	April to July
Mud nama *Nama stenocarpum*	March to October
Plummer's mariposa-lily *Calochortus plummerae*	May to July
Prostrate navarretia *Navarretia prostrata*	April to June
Red sand-verbena *Abronia maritima*	February to December
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	May to October

TABLE 3.3-3
FLOWERING PERIODS OF SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR

Species	Flowering Period
Salt spring checkerbloom *Sidalcea neomexicana*	March to June
Small-flowered morning-glory *Convolvulus simulans*	March to July
South Coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	March to August
South coast saltscale *Atriplex pacifica*	March to October
Southern tarplant *Centromadia parryi* ssp. *australis*	May to November
Southwestern spiny rush *Juncus acutus* ssp. *leopoldii*	May to June
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	June to October
Vernal barley *Hordeum intercedens*	March to June
Woolly seablite *Suaeda taxifolia*	Year-round

*Lewis' Evening Primrose (*Camissoniopsis lewisii*)*

Lewis' evening primrose is an annual herb designated as a CRPR 3 that is known from Los Angeles, Orange and San Diego counties. Lewis' evening primrose occurs in coastal sage scrub, foothill woodland and valley grassland. The flowering period occurs from May to June. This species was detected in the South Area in 2018 in all three of the previous locations where it was mapped in 2011. Each of these areas was supporting several hundred individual plants, distributed widely and somewhat sparsely. Suitable habitat for the species is limited to the South Area where it has been observed. Focused surveys targeting the species were conducted in all four areas.

*Southern Tarplant (*Centromadia parryi *ssp.* australis*)*

Southern tarplant is an annual herb designated as a CRPR 1B.1 that is known from Los Angeles, Orange, Santa Barbara, San Diego, and Ventura counties, as well as Santa Catalina Island and Baja California. Southern tarplant occurs at the margins of marshes and swamps, valley and foothill grasslands, and disturbed areas. The flowering period occurs from May to November. This species was previously detected in the North Area and was detected in 2018 on the South, Isthmus and Central Areas. Focused surveys targeting the species were conducted in all four areas.

On the North Area, southern tarplant was most common in disturbed areas, including road edges, existing and former oil well pads, and other disturbed ground. The population in the North Area was estimated to range between 5,500 and 8,000 individuals in 2016. The South and Central Areas supported many hundreds of plants each, generally along the edges or roads and paths. The Isthmus supported several thousand plants that presumably sprouted due to irrigation.

*Southwestern Spiny Rush (*Juncus acutus *ssp.* leopoldii*)*

Southwestern spiny rush is a perennial grass-like herb (rhizomatous) designated as a CRPR 4.2 that is known from Imperial, Los Angeles, Marin, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo and Solano counties. Southwestern spiny rush occur in Mesic coastal dunes, alkaline meadows and seeps, coastal salt marshes and swamps. The flowering period occurs from May to June. Suitable habitat for the species occurs within the South, Isthmus, Central and North Areas. The species has been documented in the Isthmus Area. Focused surveys targeting the species were limited to the North and Central Areas.

*Vernal Barley (*Hordeum intercedens*)*

Vernal barley is an annual herb designated as a CRPR 1B.2 that is known from Alameda, Fresno, Kings, Kern, Los Angeles, Merced, Mono, Nevada, Orange, Placer, Riverside, Sacramento, Santa Barbara, San Benito, San Diego, Tulare, Ventura, and Yolo counties. Vernal barley occurs in valley and foothill grasslands, vernal pools, coastal dunes, and coastal scrub. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted. The species is reported to occur within on-site alkali meadow habitat, growing along drying edges of seasonally-flooded, grassy swales. (Cooper and Hamilton 2015).

*Woolly Seablite (*Suaeda taxifolia*)*

Woolly seablite is a perennial shrub designated as a CRPR 4.2 that is known from San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego counties as well as from Baja California, the Channel Islands, and the Central Valley. Woolly seablite occurs in upper zones of coastal salt marshes as well as on coastal bluffs, coastal sage scrub, and at the edge of alkali marshes. The flowering period occurs year-round. This species was detected on the North Area, where it occurs in upper marsh areas or on berms associated with Steamshovel Slough and in the Isthmus Area within the Zedler Marsh. Approximately 10 individuals were detected in 2016. Suitable habitat for the species also occurs within the South, Isthmus and Central Areas. Focused surveys targeting the species were limited to the North and Central Areas.

Special-Status Plants with Potential to Occur

The following special-status plants have been documented as having potential to occur within at least one of the four areas.

*Aphanisma (*Aphanisma blitoides*)*

Aphanisma is an annual herb designated as a CRPR 1B.2 that is known from Los Angeles, Orange, Santa Barbara, San Diego and Ventura counties. *Aphanisma* occur in coastal bluff scrub, coastal dunes, and coastal scrub. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Brand's Star Phacelia (*Phacelia stellaris*)*

Brand's star *Phacelia* is an annual herb designated as a CRPR 1B.1 that is known from Los Angeles, Orange, Riverside, San Bernardino, and San Diego counties. Brand's star *Phacelia* occur in coastal bluff scrub, coastal dunes, and coastal scrub. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Catalina Mariposa-Lily (*Calochortus catalinae*)*

Catalina mariposa-lily is a perennial herb designated as a CRPR 4.2 that is known from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, and Ventura counties. Catalina mariposa-lily occur in valley and foothill grassland, chaparral, coastal scrub, and cismontane woodland. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Chaparral Sand Verbena (*Abronia villosa *var.* aurita*)*

Chaparral sand verbena is an annual herb designated as a CRPR 1B.1 that is known from Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Chaparral sand verbena occur in chaparral and coastal sage scrub. The flowering period occurs from January to September. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Coast Woolly-Heads (*Nemacaulis denudata *var.* denudata*)*

Coast woolly-heads is an annual herb designated as a CRPR 1B.2 that is known from Los Angeles, Marin, Orange, Riverside, San Diego, and San Luis Obispo counties. Coast woolly-heads occur in coastal dunes. The flowering period occurs from April to September. Suitable habitat for the species occurs within the South Area. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Coulter's Saltbush (*Atriplex coulteri*)*

Coulter's saltbush is a perennial herb designated as a CRPR 1B.1 that is known from Alameda, Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo and Ventura counties. Coulter's saltbush occurs in coastal strand, valley grassland and coastal sage scrub. The flowering period occurs from May to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Davidson's Saltscale (*Atriplex serenana *var.* davidsonii*)*

Davidson's saltscale is an annual herb designated as a CRPR 1B.2 that is known from Los Angeles, Orange, Riverside, Santa Barbara and Ventura counties. Davidson's saltscale occur in coastal Sage Scrub and wetland-riparian. The flowering period occurs from May to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Decumbent Goldenbush (*Isocoma menziesii *var.* decumbens*)*

Decumbent goldenbush is a shrub designated as a CRPR 1B.2 that is known from Los Angeles, Orange and San Diego counties. Decumbent goldenbush occur in chaparral and coastal sage scrub. The flowering period occurs from April to November. Suitable habitat for the species occurs within the South, Isthmus, Central and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Intermediate Mariposa-Lily (*Calochortus weedii *var.* intermedius*)*

Intermediate mariposa-lily is a perennial herb designated as a CRPR 1B.2 that is known from Los Angeles, Orange, and San Diego counties. Intermediate mariposa-lily occur in coastal scrub, chaparral, valley and foothill grassland. The flowering period occurs from May to July. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Los Angeles Sunflower (*Helianthus nuttallii *ssp.* parishii*)*

Los Angeles sunflower is a perennial herb designated as a CRPR 1A that is known from Los Angeles, Orange, and San Bernardino counties. Los Angeles sunflower occur in salt and freshwater marshes. The flowering period occurs from August to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species limited to the North and Central Areas.

*Lyon's Pentachaeta (*Pentachaeta lyonii*)*

Lyon's *Pentachaeta* is an annual herb designated as a CRPR 1B.1 that is known from Los Angeles and Ventura counties. Lyon's *Pentachaeta* occur in chaparral, coastal sage scrub, and valley and foothill grassland. The flowering period occurs from March to August. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Many-Stemmed Dudleya (*Dudleya multicaulis*)*

Many-stemmed *Dudleya* is a perennial herb designated as a CRPR 1B.2 that is known from Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Many-stemmed dudleya occur in chaparral, coastal sage scrub, and valley and foothill grassland. The flowering

period occurs from April to July. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Mud Nama (*Nama stenocarpum*)*

Mud Nama is an annual herb designated as a CRPR 2B.2 that is known from Imperial, Kings, Los Angeles, Merced, Orange, Riverside, and San Diego counties. Mud *Nama* occur in vernal pools and freshwater seasonal ponds. The flowering period occurs from March to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Plummer's Mariposa-Lily (*Calochortus plummerae*)*

Plummer's mariposa-lily is a perennial herb designated as a CRPR 4.2 that is known from Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. Plummer's mariposa-lily occur in coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, and lower montane coniferous forest. The flowering period occurs from May to July. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Prostrate Navarretia (*Navarretia prostrata*)*

Prostrate *Navarretia* is an annual herb designated as a CRPR 1B.1 that is known from Alameda, Amador, Butte, Fresno, Los Angeles, Merced, Monterey, Placer, Riverside, San Bernardino, San Benito, Santa Clara, San Diego, and San Luis Obispo counties. Prostrate *Navarretia* occur in coastal sage scrub, valley and foothill grassland (alkaline), and vernal pools. The flowering period occurs from April to June. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Red Sand-Verbena (*Abronia maritima*)*

Red sand-verbena is a perennial herb designated as a CRPR 4.2 that is known from Los Angeles, Monterey, Orange, Santa Barbara, San Bernardino, Santa Cruz, Sand Diego, San Luis Obispo, Sonoma, and Ventura counties. Red sand-verbena occur in marshes, swamps, and coastal dunes. The flowering period occurs from February to December. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Salt Marsh Bird's-Beak (*Chloropyron maritimum *ssp.* maritimum*)*

Salt marsh bird's-beak is an annual herb designated as a CRPR 1B.2 that is known from Humboldt, Los Angeles, Marin, Orange, Riverside, Santa Barbara, San Bernardino, Santa Clara,

San Diego, San Luis Obispo, and Ventura counties. Salt marsh bird's-beak occur in coastal dunes, salt marshes, and swamp. The flowering period occurs from May to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Salt Spring Checkerbloom (*Sidalcea neomexicana*)*

Salt spring checkerbloom is a perennial herb designated as a CRPR 2B.2 that is known from Alameda, Los Angeles, Monterey, Orange, Riverside, San Bernardino, San Diego, and Ventura counties. Salt spring checkerbloom occur in alkali sinks and coastal sage scrub. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*Small-Flowered Morning-Glory (*Convolvulus simulans*)*

Small-flowered morning-glory is an annual herb designated as a CRPR 4.2 that is known from Contra Costa, Fresno, Kings, Kern, Los Angeles, Merced, Monterey, Orange, Riverside, Santa Barbara, San Bernardino, San Benito, San Diego, San Joaquin, San Luis Obispo, Solano, Stanislaus, Tulare, and Ventura counties. Small-flowered morning-glory occur in chaparral, coastal scrub, and valley and foothill grassland. The flowering period occurs from March to July. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*South Coast Branching Phacelia (*Phacelia ramosissima *var.* austrolitoralis*)*

South Coast branching *Phacelia* is a perennial herb designated as a CRPR 3.2 that is known from Los Angeles, Monterey, Orange, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Tulare, and Ventura counties. South Coast branching phacelia occur in chaparral, coastal scrub, coastal dunes and coastal salt marsh. The flowering period occurs from March to August. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.

*South Coast Saltscale (*Atriplex pacifica*)*

South Coast saltscale is an annual herb designated as a CRPR 1B.2 that is known from Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, and Ventura counties. South Coast saltscale occur in coastal bluff scrub, coastal dunes, coastal sage scrub and playas. The flowering period occurs from March to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

*Ventura Marsh Milk-Vetch (*Astragalus pycnostachyus *var.* lanosissimus*)*

Ventura marsh milk-vetch is a perennial herb designated as a CRPR 1B.1 that is known from Los Angeles, Marin, and Ventura counties. Ventura marsh milk-vetch occur in coastal salt marsh. The flowering period occurs from June to October. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018. Focused surveys targeting the species were limited to the North and Central Areas.

~~*Vernal Barley (*Hordeum intercedens*)*~~

~~Vernal barley is an annual herb designated as a CRPR 1B.2 that is known from Alameda, Fresno, Kings, Kern, Los Angeles, Merced, Mono, Nevada, Orange, Placer, Riverside, Sacramento, Santa Barbara, San Benito, San Diego, Tulare, Ventura, and Yolo counties. Vernal barley occur in valley and foothill grasslands, vernal pools, coastal dunes, and coastal scrub. The flowering period occurs from March to June. Suitable habitat for the species occurs within the South, Isthmus, Central, and North Areas. The species was not observed during biological resources surveys conducted in 2011 or 2018; however, focused surveys targeting the species were not conducted.~~

Table 3.3-4, *Special-Status Plants with Potential to Occur within the Program Area*, provides a summary of all special-status plant species determined to be present or to have potential to occur within each of the four program areas.

TABLE 3.3-4
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR WITHIN THE PROGRAM AREA

Species	South Area	Isthmus Area	Central Area	North Area
Aphanisma *Aphanisma blitoides*	H	H		H
Brand's star phacelia *Phacelia stellaris*	H	H		H
California box-thorn *Lycium californicum*	P	P	H	H
Catalina mariposa-lily *Calochortus catalinae*	H	H	H	H
Chaparral sand-verbena *Abronia villosa* var. *aurita*	H	H	H	H
Coast woolly-heads *Nemacaulis denudata* var. *denudata*	H			H
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	P	H	H	H
Coulter's saltbush *Atriplex coulteri*	H	H	H	H
Davidson's saltscale *Atriplex serenana* var. *davidsonii*	H	H	H	H
Decumbent goldenbush *Isocoma menziesii* var. *decumbens*	H	H	H	H
Estuary seablite *Suaeda esteroa*	H	P	H	P

TABLE 3.3-4
SPECIAL-STATUS PLANTS WITH POTENTIAL TO OCCUR WITHIN THE PROGRAM AREA

Species	South Area	Isthmus Area	Central Area	North Area
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	H	H	H	H
Lewis' evening primrose *Camissoniopsis lewisii*	P	H	H	H
Los Angeles sunflower *Helianthus nuttallii* ssp. *parishii*	H	H	H	H
Lyon's pentachaeta *Pentachaeta lyonii*	H	H	H	H
Many-stemmed dudleya *Dudleya multicaulis*	H	H	H	H
Mud nama *Nama stenocarpum*	H		H	H
Plummer's mariposa-lily *Calochortus plummerae*	H	H	H	H
Prostrate navarretia *Navarretia prostrata*	H	H	H	H
Red sand-verbena *Abronia maritima*	H	H	H	H
Salt marsh bird's-beak *Chloropyron maritimum* ssp. *maritimum*	H	H	H	H
Salt spring checkerbloom *Sidalcea neomexicana*	H	H	H	H
Small-flowered morning-glory *Convolvulus simulans*	H	H	H	H
South Coast branching phacelia *Phacelia ramosissima* var. *austrolitoralis*	H	H	H	H
South coast saltscale *Atriplex pacifica*	H	H	H	H
Southern tarplant *Centromadia parryi* ssp. *australis*	P	P	P	P
Southwestern spiny rush *Juncus acutus* ssp. *leopoldii*	H	P	H	H
Ventura Marsh milk-vetch *Astragalus pycnostachyus* var. *lanosissimus*	H	H	H	H
Vernal barley *Hordeum intercedens*	~~H~~P	H	H	H
Woolly seablite *Suaeda taxifolia*	H	P	H	P

H=habitat present; P=species present

3.3.2.5 Special-Status Wildlife

Special-status wildlife species are legally protected under CESA, FESA, or other regulations, or are considered sufficiently rare by the scientific community to qualify for such a listing. For purposes of this PEIR, special-status wildlife species include:

1. Officially listed by the state or the federal government as endangered, threatened, or rare;

2. A candidate for state or federal listing as endangered, threatened, or rare;
3. Taxa designated by the Legislature as Fully Protected under Fish and Game Code Sections 3511 (birds), 4700 (mammals), and 5050 (reptiles and amphibians);
4. Taxa designated by the CDFW as California Species of Special Concern;
5. Taxa that meet the criteria for listing, even if not currently included on any list, as described in *CEQA Guidelines* Section 15380; and
6. Taxa that are biologically rare, very restricted in distribution, or declining throughout their range but not currently threatened with extirpation (includes species with a CNDDB state rank of S1, S2, or S3).

Table 3.3-5, *Special-Status Wildlife with Potential to Occur*, provides a summary of all wildlife species determined to have potential to occur with the program area based on (1) species identified by the 2019 CNDDB as occurring (either currently or historically) in the USGS Anaheim, La Habra, Long Beach, Los Alamitos, Newport Beach, Seal Beach, South Gate and Whittier Quadrangles and (2) records of special-status species that are known to occur within the vicinity of the proposed program, or for which potentially suitable habitat occurs on site. A table providing a summary of those special-status wildlife determined to be unlikely to occur and therefore were not analyzed further is included in Appendix C3. Following the table, additional discussions are provided for any special-status animals observed on site or for which potentially suitable habitat occurs on site.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Invertebrates			
Crotch bumble bee *Bombus crotchii*	Federal: None State: None CDFW: None CNDDB: S1S2	Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.	Unlikely. Not documented on site, no suitable habitat present.
Dorothy's El Segundo dune weevil *Trigonoscuta dorothea*	Federal: None State: None CDFW: None CNDDB: S1	Sand dunes in El Segundo, CA.	Unlikely. Not documented on site, no suitable habitat present.
Globose dune beetle *Coelus globosus*	Federal: None State: None CDFW: None CNDDB: S1	Coastal dunes. Inhabitant of coastal sand dune habitat; erratically distributed from Ten-Mile Creek in Mendocino County south to Ensenada, Mexico.	Unlikely. Not documented on site, no suitable habitat present.
Mimic tryonia (California brackishwater snail) *Tryonia imitator*	Federal: None State: None CDFW: None CNDDB: S2	Coastal areas with brackish waters.	Moderate. Suitable habitat present at all four sites; however, this species has not documented in the program area.
Monarch—California overwintering population *Danaus plexippus* pop. 1	Federal: Candidate State: None CDFW: None CNDDB: S2S3	Roosts in winter in wind-protected tree groves along the California coast from northern Mendocino to Baja California, Mexico.	Moderate. Potential to occur within extensive non-native palm tree and/or *Eucalyptus* populations in all four areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Mudflat tiger beetle *Cicindela trifasciata sigmoidea*	Federal: None State: None CDFW: None CNDDB: N/A	This predatory beetle inhabits salt marshes, mudflats and salt pannes where they make burrows in the intertidal zone.	Present. This species has been documented on tidal mudflats in North Area (Steamshovel Slough). Suitable habitat also occurs within South, Isthmus, and Central Areas.
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None CDFW: None CNDDB: S1S2	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties. Hills and mesas near the coast. Need high densities of food plants *Plantago erecta*, *P. insularis*, and *Orthocarpus purpurescens*.	Unlikely. Not documented on site, no suitable habitat present.
Riverside fairy shrimp *Streptocephalus woottoni*	Federal: FE State: None CDFW: None CNDDB: S1S2	Deep seasonal vernal pools, with warm water, and low to moderate dissolved solids, that remained filled for extended periods of time. Annual grasslands or patches.	Unlikely. Not documented on site. No suitable habitat within site due to the lack of long-lived (>2 months) vernal pools.
Salt marsh tiger beetle *Cicindela hemorrhagica*	Federal: None State: None CDFW: N/A CNDDB: N/A	Salt marshes, mudflats and salt pannes where they make burrows in the intertidal zone	Present. This species has been documented on tidal mudflats at North Area (Steamshovel Slough) and Isthmus Area (Zedler Marsh). Suitable habitat within South and Central Areas.
Salt marsh wandering skipper *Panoquina errans*	Federal: None State: None CDFW: None CNDDB: S2	Coastal salt marsh and coastal strand areas dominated by saltgrass.	Present. This species is present throughout program boundary within upper marsh and non-tidal stands of its host plant *Distichlis spicata*.
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None CDFW: None CNDDB: S2	Seasonal vernal pools.	Unlikely. Not documented in program area. No suitable habitat within program area due to the lack of long-lived (>2 months) vernal pools.
Sandy beach tiger beetle *Cicindela hirticollis gravida*	Federal: None State: None CDFW: None CNDDB: S2	Forages in open unvegetated areas such as marsh pannes and levees. Larvae burrow in moist unvegetated substrates.	Moderate. This species has not been documented in program area; however, there is suitable habitat within North Area (Steamshovel Slough) and other tidal areas in the South, Isthmus and Central Areas.
Senile tiger beetle *Cicindela senilis frosti*	Federal: None State: None CDFW: None CNDDB: S1	Open, unvegetated areas in or near salt marshes.	Moderate. This species has not been documented in program area; however, there is suitable habitat within North Area (Streamshovel Slough) and other tidal areas in the South, Isthmus and Central Areas.
Western beach tiger beetle *Cicindela latesignata*	Federal: None State: None CDFW: None CNDDB: S1	Forages in open unvegetated areas such as marsh pannes and levees. Larvae burrow in moist unvegetated substrates.	Moderate. Not documented on site, potentially suitable habitat within North Area (Streamshovel Slough) and other tidal areas in the South, Isthmus and Central Areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Western tidal-flat tiger beetle *Cicindela gabbii*	Federal: None State: None CDFW: None CNDDB: S1	Open, unvegetated areas in or near salt marshes.	Moderate. This species has not been documented in program area; however, there is suitable habitat within North Area (Streamshovel Slough) and other tidal areas in the South, Isthmus and Central Areas.
Fish			
Steelhead – Southern California DPS *Oncorhynchus mykiss irideus* pop. 10	Federal: FE State: None CDFW: None CNDDB: S1	Aquatic, South Coast flowing waters. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Moderate. This species has not been documented in program area; however, there is suitable habitat within the North Area (Los Cerritos Channel) and Central Area (San Gabriel River). Focused fish surveys have not been completed.
Tidewater goby *Eucyclobobius newberryi*	Federal: FE State: SE CDFW: CSC CNDDB: S3	Inhabits benthic zone of shallow coastal lagoons and estuaries where brackish conditions occur.	Moderate. This species has not been documented in program area; however, there is suitable habitat within the North Area (Steamshovel Slough) and South Area. Habitat is suboptimal due to a lack of true estuarine conditions, however, recent, focused fish surveys have not been completed.
Amphibians			
Western spadefoot toad *Spea hammondi*	Federal: None State: None CDFW: CSC CNDDB: S3	Coastal sage scrub, vernal pools, and grasslands; breeds in associated temporary pools and riparian areas.	Unlikely. Not documented on site. Lack of suitable freshwater seasonal ponds that pond for sufficient duration to support breeding.
Reptiles			
Coast horned lizard *Phrynosoma blainvilli*	Federal: None State: None CDFW: CSC CNDDB: S3S4	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands. Main prey item is harvester ants.	Low. This species has not been documented in program area. There is suitable habitat within all four areas; however, food source for this species is not abundant due to the urbanization-influenced invasion of the Argentine ant.
Coastal whiptail *Aspidoscelis tigris stejnegeri*	Federal: None State: None CDFW: CSC CNDDB: S3	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Low. This species has not been documented; however, there is suitable habitat throughout the program area.
Orange-throated whiptail *Aspidoscelis hyperythra*	Federal: None State: None CDFW: WL CNDDB: S2S3	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes & other sandy areas with patches of brush & rocks. Perennial plants necessary for its major food –termites.	Low. This species has not been documented; however, there is suitable habitat throughout the program area.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Pacific green sea turtle *Chelonia mydas*	Federal: FT State: None CDFW: None CNDDB: S1	Green turtles are generally found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets. The turtles are attracted to lagoons and shoals with an abundance of marine grass and algae.	Present. This migratory reptile is a resident in the Central Area (San Gabriel River) and has also been documented throughout Alamitos Bay, in the South Area (Haynes Cooling Channel) and upstream of the North Area (Steamshovel Slough).
Red diamond rattlesnake *Crotalus ruber*	Federal: None State: None CDFW: CSC CNDDB: S3	Chaparral, woodland, grassland, & desert areas from coastal San Diego county to the eastern slopes of the mountains. Occurs in rocky areas & dense vegetation. Needs rodent burrows, cracks in rocks or surface cover objects.	Present. Observed within the program area, which is suspected to have been released to the area.
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: None CDFW: CSC CNDDB: S3	Generally, south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	Low. Not documented in the program area; however, suitable habitat occurs within all four areas.
Western pond turtle *Emys marmorata*	Federal: None State: None CDFW: CSC CNDDB: S3	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Moderate. Not documented in the program area; however, freshwater marsh areas present within the South, Central and North Areas.
Birds			
American peregrine falcon *Falco peregrinus anatum*	Federal: None State: None CDFW: CFP CNDDB: S3S4	Near wetlands, lakes, rivers or other water, on cliffs, banks, dunes, mounds, also human-made structures.	Present. Observed on site. Suitable foraging habitat in North Area (Steamshovel Slough) and South, Isthmus and Central Areas. Suitable breeding sites absent in all four areas.
Bank swallow *Riparia*	Federal: None State: ST CDFW: None CNDDB: S2	Colonial nester; nests primarily in riparian and other lowland habitats west or the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Unlikely. Not documented on site, no suitable habitat present.
Belding's savannah sparrow *Passerculus sandwichensis beldingi*	Federal: None State: SE CDFW: None CNDDB: S3	Coastal salt marshes. Nests in Salicornia sp. and about margins of tidal flats.	Present. Observed in multiple locations in all four areas. Suitable foraging and breeding habitat within North Area (Steamshovel Slough) and other areas of pickleweed habitat on the South, Isthmus and Central Areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Black skimmer *Rynchops niger*	Federal: None State: None CDFW: CSC CNDDB: S2	Nests on gravel bars, low islets and sandy beaches, in unvegetated sites.	Present. Observed on site. Suitable foraging habitat within the North Area (Steamshovel Slough), Central Area (San Gabriel River) and South Area (Haynes Cooling Channel) for foraging. Suitable breeding habitat absent in all four areas.
Burrowing owl *Athene cunicularia*	Federal: None State: None CDFW: CSC CNDDB: S3	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.	Present. Individuals were observed in Isthmus Area. All four areas exhibit wintering habitat. Occurs as a migratory winter visitor but is not expected as a breeding species.
California black rail *Laterallus jamaicensis coturniculus*	Federal: None State: ST CDFW: CFP CNDDB: S1	Salt marshes bordering larger bays, coastal spartina marshes, inland in dense, shortgrass, shallow marshes.	Low. Not documented on site; however, suitable foraging and breeding habitat present in marsh areas of North Area (Steamshovel Slough) and tidal areas within the South, Isthmus and Central Areas.
California brown pelican *Pelecanus occidentalis californicus*	Federal: None State: None CDFW: CFP CNDDB: S3	Coastal, salt bays, ocean, beaches. Nests on coastal islands of small to moderate size that afford immunity from attack by ground-dwelling predators.	Present. Observed on site. Suitable foraging habitat present in marsh areas of North Area (Steamshovel Slough) and tidal areas within the South, Isthmus and Central Areas. Suitable breeding habitat absent in all four areas.
California least tern *Sternula antillarum browni*	Federal: FE State: SE CDFW: CFP CNDDB: S2	Flat, vegetated substrates near the coast. Occurs near estuaries, bays, or harbors where fish is abundant.	Present. Has been observed foraging in North Area (Steamshovel Slough), Central Area (San Gabriel River) and South Area (Haynes Cooling Channel) where suitable foraging habitat occurs. Salt flats within the Central Area provides potential nesting habitat.
Coastal cactus wren *Campylorhynchus brunneicapillus sandiegensis*	Federal: None State: None CDFW: SSC CNDDB: S3	Southern California coastal sage scrub. Wrens require tall opuntia cactus for nesting and roosting.	Unlikely. Not documented on site, no suitable habitat present.
Coastal California gnatcatcher *Polioptila californica*	Federal: FT State: None CDFW: CSC CNDDB: S2	Low elevation coastal sage scrub and coastal bluff scrub.	Low. Not documented on site; however, suitable foraging habitat present in all four areas. Suitable breeding habitat absent in all four areas.
Ferruginous hawk *Buteo regalis*	Federal: None State: None CDFW: WL CNDDB: S3S4	Only present as wintering individuals. Prefers open grasslands and agricultural areas.	Unlikely. Not documented on site, no suitable habitat present.
Grasshopper sparrow *Ammodramus savannarum*	Federal: None State: None CDFW: SSC CNDDB: S3	Dense grasslands on rolling hills, lowland plains, in valleys and on hillsides on lower mountain slopes. Favors native grasslands with a mix of grasses, forbs and scattered shrubs. Loosely colonial when nesting.	Unlikely. Not documented on site, no suitable habitat present.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Least Bell's vireo *Vireo bellii pusilus*	Federal: FE State: SE CDFW: None CNDDB: S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Present. Observed within the Isthmus Area. Suitable foraging habitat limited to the active habitat mitigation/restoration site. Suitable breeding habitat absent in all four areas.
Merlin *Falco columbarius*	Federal: None State: None CDFW: WL CNDDB: S3S4	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Present. Documented on site but specific locations were not given.; Suitable foraging habitat present in all four areas. Suitable breeding habitat absent in all four areas.
Loggerhead shrike *Lanius ludovicianus*	Federal: None State: None CDFW: CSC CNDDB: S4	Broken woodlands, savannah, pinyon-juniper, Joshua tree & riparian woodlands, desert oases, scrub & washes. Prefers open country for hunting with perches for scanning and fairly dense shrubs and brush for nesting.	Present. Observed throughout the program boundary. Suitable foraging and breeding habitat present in all four areas.
Northern harrier (nesting) *Circus cyaneus*	Federal: None State: None CDFW: CSC CNDDB: S3	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Present. Observed within the program boundary. Suitable foraging habitat present throughout the program boundary. Limited potential for breeding in all four areas.
Osprey *Pandion haliaetus*	Federal: None State: None CDFW: WL CNDDB: S4	Riparian forest, ocean shore, bays, freshwater lakes, and larger streams.	Present. Observed within the program boundary. Suitable foraging habitat present with all four areas. Limited potential for breeding in all for areas.
Ridgway's rail *Rallus obsoletus*	Federal: FE State: SE CDFW: CFP CNDDB: S1	Found in salt marshes where cordgrass and pickleweed are the dominant vegetation. Requires dense growth of either pickleweed or cordgrass for nesting or escape cover, feeds on mollusks and crustaceans.	~~Present~~High. ~~Observed on site.~~ Suitable foraging and breeding habitat present within North Area (Steamshovel Slough) and tidal marsh areas in the South and Isthmus Areas and non-tidal marsh in the Central Area.
Short-eared owl *Asio flammeus*	Federal: None State: None CDFW: CSC CNDDB: S3	Found in swamplands, both fresh and salt; lowland meadows; irrigated alfalfa fields. Tule patches/tall grass needed for nesting/daytime seclusion. Nests on dry ground in depression concealed in vegetation.	Present. Observed on site. Suitable foraging habitat occurs during winter in the North Area (Steamshovel Slough) and tidal marsh areas in the South, Isthmus and Central Areas. Suitable breeding habitat absent in all four areas.
Southern California rufous-crowned sparrow *Aimophila ruficeps canescens*	Federal: None State: None CDFW: WL CNDDB: S3	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Low. Not documented on site; however, suitable foraging habitat present in all four areas. Suitable breeding habitat absent in all four areas.
Southwestern willow flycatcher *Empidonax traillii extimus*	Federal: FE State: SE CDFW: None CNDDB: S1	Riparian woodlands in Southern California.	Low. Not documented on site; however, suitable foraging habitat present in all four areas. Suitable breeding habitat absent in all four areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Swainson's hawk *Buteo swainsoni*	Federal: None State: ST CDFW: None CNDDB: S3	Breeding habitat consists of grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, & agricultural or ranch lands. Requires adjacent suitable foraging areas such as grasslands or alfalfa or grain fields that support rodent populations.	Unlikely. Not documented on site, no suitable habitat present.
Tri-colored blackbird *Agelaius tricolor*	Federal: None State: ST CDFW: CSC CNDDB: S1S2	Requires open water, protected nesting and foraging area with insect prey within a few km of the colony.	~~Moderate~~Present. ~~Not documented on site; however, s~~According to the El Dorado Audubon Society (EDAS) in a comment letter submitted on this Draft PEIR, (Mary Parsell, EDAS President, June 9, 2020). This species was recorded to ebird (https://ebird.org/home) in 2015 for an occurrence within the Central Area at the Marketplace Marsh. Additionally, suitable foraging habitat present within freshwater or brackish wetlands found in all four areas; however, ~~s~~Suitable breeding habitat absent in all four areas.
Western snowy plover *Charadrius alexandrinus nivosus*	Federal: FT State: None CDFW: CSC CNDDB: S2S3	Sandy or gravelly beaches along the coast, estuarine salt ponds, alkali lakes, and at the Salton Sea.	Moderate. Not documented on site; however, suitable foraging habitat present within the North Area (Steamshovel Slough) and tidal marsh areas in the South, Isthmus and Central Areas. Salt flats within the Central Area provides potential nesting habitat.
Western yellow-billed cuckoo *Coccyzus americanus occidentalis*	Federal: FT State: SE CDFW: None CNDDB: S1	Dense, wide riparian woodlands with well-developed understories.	Unlikely. Not documented on site, no suitable habitat present.
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: None CDFW: CFP CNDDB: S3S4	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low (nesting). No nests have been documented within the program area; however, this species has been observed foraging in the program area.
Yellow rail *Coturnicops noveboracensis*	Federal: None State: None CDFW: CSC CNDDB: S1S2	Freshwater marsh, meadow & seep, summer resident in eastern Sierra Nevada in Mono County.	Low. Not documented in the program area; however, suitable foraging habitat present within freshwater or brackish wetlands found in all four areas. Suitable breeding habitat absent in all four areas.
Yellow warbler *Dendroica petechia brewsteri*	Federal: None State: None CDFW: CSC CNDDB: S3S4	Riparian plant associations. Prefers willows, cottonwoods, aspens, sycamores & alders for nesting & foraging. Also nests in montane shrubbery in open conifer forests.	Low. Not documented in the program area; however, suitable foraging habitat present within the Isthmus Area (active habitat mitigation/restoration site) where least Bell's vireo was observed in 2018. Suitable breeding habitat absent in all four areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Yellow-breasted chat *Icteria virens*	Federal: None State: None CDFW: CSC CNDDB: S3	Summer resident; inhabits riparian thickets of willow & other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 feet of ground.	Present. Observed foraging throughout the program area. Suitable foraging habitat present in all four areas. Suitable breeding habitat absent in all four areas.
Mammals			
American badger *Taxidea taxus*	Federal: None State: None CDFW: CSC CNDDB: S3	Occurs in drier shrub, forest, and herbaceous habitats. Needs open, uncultivated ground and friable soils for digging burrows. Preys on burrowing rodents.	Unlikely. Not documented on site, no suitable habitat present.
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: None CDFW: CSC CNDDB: S3	Occurs in low-lying arid areas in Southern California. Roosts in high cliffs or rocky outcrops.	Unlikely. Not documented on site, no suitable habitat present.
Hoary bat *Lasiurus cinereus*	Federal: None State: None CDFW: None CNDDB: S4	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Unlikely. Not documented on site, no suitable habitat present.
Pacific pocket mouse *Perognathus longimembris pacificus*	Federal: FE State: None CDFW: CSC CNDDB: S1	Seems to prefer soils of fine alluvial sands near the ocean.	Moderate. Not documented in the program area; however, suitable habitat present in North Area (Steamshovel Slough) and tidal marsh areas in the South, Isthmus and Central Areas.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: None CDFW: SSC CNDDB: S3	Variety of arid areas in Southern California; pine-juniper woodlands, desert scrub, palm oasis, desert wash, desert riparian, etc. Rocky areas with high cliffs.	Unlikely. Not documented on site, no suitable habitat present.
Silver-haired bat *Lasionycteris noctivagans*	Federal: None State: None CDFW: None CNDDB: S3S4	Temperate, northern hardwoods with ponds or streams nearby. Roost in hollow snags and bird nests.	Unlikely. Not documented on site, no suitable habitat present.
South coast marsh vole *Microtus californicus stephensi*	Federal: None State: None CDFW: CSC CNDDB: S1S2	Tidal marshes in Los Angeles, Orange and southern Ventura Counties.	Moderate. Not documented in the program area; however, suitable habitat present in North Area (Steamshovel Slough) and tidal marsh areas in the South, Isthmus and Central Areas.
Southern California salt marsh shrew *Sorex ornatus salicornicus*	Federal: None State: None CDFW: CSC CNDDB: S1	Coastal marshes in Los Angeles, Orange and southern Ventura Counties. Requires dense vegetation and woody debris for cover.	Moderate. Not documented in the program area; however, suitable habitat present in North Area (Steamshovel Slough) and tidal marsh areas in the South, Isthmus and Central Areas.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: None CDFW: CSC CNDDB: S3S4	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc. Roosts in crevices in cliff faces, high buildings, trees, & tunnels.	Low. Not documented in the program area; however, suitable foraging habitat present in all four areas and suitable roosting habitat present within non-native palm tree in all four areas.

TABLE 3.3-5
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR

Species	Status	Habitat	Potential for Occurrence
Western yellow bat *Lasiurus xanthinus*	Federal: None State: None CDFW: CSC CNDDB: S3	Primarily roost in trees hanging from the underside of leaves. Commonly found in dead fronds of non-native palms	Low. Not documented in the program area; however, suitable foraging habitat present in all four areas. Suitable roosting habitat present within extensive non-native palm tree populations in all four areas.

SOURCE: Glenn Lukos Associates Inc. 2017a; Coastal Restoration Consultants 2019; CNDDB, 2019, Tidal Influence 2012.

STATUS CODES:

Federal	State	CDFW
FE = Federally Endangered	SE = State Endangered	CSC = California Species of Special Concern
FT = Federally Threatened	ST = State Threatened	CFP = California Fully Protected Species
FSC = Federal Species of Special Concern		WL = Watch List

CNDDB Element Ranking

S1 = Critically Imperiled—Critically imperiled in the state because of extreme rarity (often 5 or few populations) or because of factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2 = Imperiled—Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the state.

S3 = Vulnerable—Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer).

S4 = Apparently Secure—Uncommon but not rare in the state; some cause for long-term concern due to declines or other factors.

? = A question mark denotes an inexact numeric rank due to insufficient samples over the full expected range of the type, but existing information points to this rank.

Special-Status Wildlife Documented

The following special-status wildlife species have been documented as occurring within at least one of the four areas.

Invertebrates

Mudflat Tiger Beetle (*Cicindela trifasciata sigmoidea*)

The mudflat tiger beetle is considered locally rare, though it is not a state- or federally-listed species or a California Species of Special Concern. This predatory beetle inhabits salt marshes, mudflats and salt pannes where they make burrows in the intertidal zone. It has been documented as occurring on mudflats in the North Area (Steamshovel Slough) (Tidal Influence 2012). Suitable habitat also occurs within the mudflats in the South, Isthmus and Central Areas.

Salt Marsh Tiger Beetle (*Cicindela hemorrhagica hemorrhagica*)

The salt marsh tiger beetle is considered locally rare, though it is not a state- or federally-listed species or a California Species of Special Concern. This predatory beetle inhabits salt marshes, mudflats and salt pannes where they make burrows in the intertidal zone. It has been documented as occurring on mudflats in the North Area (Steamshovel Slough) and Isthmus Area (Zedler Marsh) (Tidal Influence 2012). It also has potential to occur on mudflats within the South and Central Areas.

Salt Marsh Wandering Skipper (*Panoquina errans*)

The wandering skipper is a small light brown butterfly that is listed on the IUCN Red List as 2.3, which means "near threatened." The flight season extends from March to November and peaks

during the summer. The wandering skipper's known range extends along the California coast from the cape region of Baja California to Santa Barbara County, but only in suitable localities within this range that include areas with saltgrass, which is the most common larval host plant in areas with tidal influence. Suitable habitat for this species occurs within the North Area (Steamshovel Slough) as well as areas that exhibit tidal influence and support patches of saltgrass in the South, Isthmus and Central Areas. Focused surveys were not performed for this species; however, it is expected to occur throughout the proposed program area where suitable habitat is present.

Reptiles

Pacific Green Sea Turtle (*Chelonia mydas*)

The Pacific green sea turtle is a federal endangered species and listed on the IUCN Red List as 4, which means "endangered." This species is generally found in fairly shallow waters (except when migrating) inside reefs, bays, and inlets. The turtles are attracted to lagoons and shoals with an abundance of marine grass and algae. They have been documented immediately upstream of the North Area in Steamshovel Slough, and have the potential to occur at the mouth of the slough. They also occur within the Central Area (San Gabriel River) and South Area (Haynes Cooling Channel) as well as within the Los Cerritos Channel (Tidal Influence 2012). Ongoing monitoring of the species is currently taking place within the program area and data has been collected from 2013 to present.

Red Diamond Rattlesnake (*Crotalus ruber ruber*)

The red diamond rattlesnake is a California Species of Special Concern. The red diamond rattlesnake occurs throughout much of San Diego and Orange Counties as well as in western Riverside County and southwestern San Bernardino County in chaparral, woodland, grassland, and desert habitats. Red diamond rattlesnakes forage primarily on small mammals but will consume lizards, birds, and other snakes. Red diamond rattlesnake has been documented on site (Tidal Influence 2012), but only one individual was observed and may have been an unauthorized release.

Birds

Belding's Savannah Sparrow (*Passerculus sandwichensis beldingi*)

The Belding's savannah sparrow is a state endangered bird, and a candidate species for federal protection. This species is a non-migratory subspecies that occurs in coastal salt marshes between Goleta Slough, Santa Barbara County, and Bahia de San Quentin in Mexico. The Belding's savannah sparrow is entirely dependent on salt marshes for nesting and foraging. As such, the Belding's savannah sparrow thus resides year-round in this habitat and is resident and common on the site. The highest concentrations of the Belding's savannah sparrow are within and in proximity to Steamshovel Slough in the North Area and in the South Area. Based on focused breeding season surveys conducted in 2017, the current capacity of the Steamshovel Slough area is estimated to be between 30 to 42 territories, and two territories south of the slough (GLA 2017e). This species nests preferentially in common pickleweed and/or Parish's glasswort. In addition, this species was also observed foraging within areas of pickleweed and Parish's glasswort south of Steamshovel Slough.

Black Skimmer (*Rynchops niger*)

The black skimmer is a California Species of Special Concern. The black skimmer breeds on gravel bars, low islets and sandy beaches on the coast from San Francisco Bay south to San Diego Bay and in the interior at the Salton Sea. Black skimmers forage along calm, shallow water. Habitat for prey occurs over the aquatic environments located in the South Area, Central Area, and North Area. The black skimmer was observed on site during surveys and are likely to forage within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel).

Burrowing Owl (*Athene cunicularia*)

The burrowing owl is a California Species of Special Concern. Habitat for the burrowing owl is varied, including short-grass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Burrowing owls require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows that are approximately 4-8-inches in diameter, such as from ground squirrels. As a primary habitat need, they require the use of these rodent burrows, and can also occupy man-made structures such as irrigation pipes, for roosting and nesting cover. Burrowing owls have been observed within the Isthmus Area and suitable habitat occurs in all four areas of the proposed program; however, this species was not detected during focused surveys in 2015, 2016, or 2017 in the North and Central Areas.

California Brown Pelican (*Pelecanus occidentalis californicus*)

The California brown pelican is a California Fully Protected species. The California brown pelican breeds on the Channel Islands and occurs in estuarine, marine subtidal, and marine pelagic waters along California coast. It is rare to uncommon on the Salton Sea. California brown pelicans forage almost entirely on fish. Foraging habitat occurs in the South Area, Central Area and North Area. California brown pelican has been observed on site during surveys and are likely to forage within the North Area (Steamshovel Slough), Central Area (San Gabriel River) and South Area (Haynes Cooling Channel); however, there are no potential breeding areas within the proposed program area.

California Least Tern (*Sterna antillarum browni*)

The California least tern is listed under CESA and FESA as endangered and is also a California Fully Protected species. In Southern California, it breeds along the coast from San Diego County to San Luis Obispo County. This species has been observed foraging within the North Area (Steamshovel Slough). Potential foraging habitat is also present in the Central Area (San Gabriel River), Isthmus Area and South Area (Haynes Cooling Channel); however, there are no potential breeding areas within the proposed program area.

Least Bell's Vireo (*Vireo bellii pusilus*)

The least Bell's vireo is listed as endangered in accordance with CESA and FESA. The least Bell's vireo is a rare, local summer resident in San Benito and Monterey Counties, Southern California from Santa Barbara County south to San Diego County and along the western edge of the deserts. Least Bell's vireo nests and forages in willows and other low, dense riparian habitat feeding on insects. Foraging habitat occurs in the Central, Isthmus and North Areas and least

Bell's vireo was observed in the Isthmus Area within the active habitat mitigation/restoration site during focused surveys and may forage within freshwater riparian habitats. Suitable breeding habitat is limited due to the relatively small amount and composition of tree/scrub riparian habitat that is present.

Loggerhead Shrike (*Lanius ludovicianus*)

The loggerhead shrike is a California Species of Special Concern. Loggerhead shrike is a common resident and winter visitor in lowlands and foothills throughout California. It prefers open habitats with scattered perches and as shrubs, trees, posts, fences and utility lines where it forages mostly large insects. Loggerhead shrike builds nests in shrubs or trees with dense foliage. Foraging habitat occurs in the South Area, Isthmus Area, Central Area, and North Area. Breeding habitat is limited in these areas due to the low numbers of suitable nest shrubs and trees. Nonetheless, foraging habitat is present and loggerhead shrike was observed within the proposed program area during biological resources surveys conducted in 2012 (Tidal Influence 2012).

Merlin (*Falco columbarius*)

The merlin is a California Watch List species. Merlin is an uncommon winter migrant and occurs in most of the western half of the state along coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, edges, and early successional stages. Merlin primarily feed on small birds but also small mammals and insects. Merlin breed in Canada and Alaska and are not known to breed in California. Foraging habitat occurs in the South Area, Isthmus Area, Central Area, and North Area. Breeding habitat is absent. Merlin was observed within the proposed program area during surveys conducted in 2012 (Tidal Influence 2012).

Northern Harrier (Nesting) (*Circus cyaneus*)

The northern harrier is a California Species of Special Concern. This species range is across all of North America, wintering across most of the southern United States and into Mexico. It has been documented that the northern harrier is now one of the rarest nesting raptors in southwestern California. Characteristically, this raptor inhabits marshlands, both coastal salt and freshwater, but often forages over grasslands and fields, requiring open habitats for foraging. Northern harrier have occasionally been observed foraging within the proposed program area and suitable foraging habitat occurs within the South, Isthmus, Central and North Areas. Although there are no records of nesting in the vicinity, there are potentially suitable areas for nesting in some of the higher areas of the North (Steamshovel Slough), South, Isthmus and Central Areas.

Osprey

The osprey is a California watch list species. This species inhabits riparian forest, ocean shore, bays, freshwater lakes, and larger streams. The osprey primarily forages in open, clear water and nests in large snags, dead-topped trees, on cliffs, or on human made structures. Suitable foraging occurs in open water in the North, South, Isthmus and Central Areas. There are limited potentially suitable areas for nesting in the mature trees and human made structures within the North, South, Isthmus and Central Areas. Osprey has been observed within the program boundary.

~~**Ridgway's Rail (*Rallus obsoletus*)**~~

~~The Ridgway's rail (formerly designated as the light-footed clapper rail) is a federal endangered, state endangered, and California fully protected species. In Southern California, the Ridgway's rail is a year-round resident that prefers coastal salt marshes, but also inhabits freshwater marshes. Cordgrass (*Spartina* spp.) and bulrush (*Bolboshchoenus* spp. and *Schoenoplectus* spp.) are among the preferred species for nesting. The North Area (Steamshovel Slough) and tidal marsh within the South, Isthmus and Central Areas exhibit the highest potential for supporting this species; this species has been documented within the proposed program area during the various surveys and habitat assessments that have been conducted.~~

Short-Eared Owl (*Asio flammeus*)

The short-eared owl is a California Species of Special Concern. It prefers open habitats such as grasslands, prairie, agricultural fields, salt marshes, estuaries, and mountain meadows. Breeding habitat must have sufficient ground cover to conceal nests and nearby sources of small mammals for food. This species roosts in disturbed areas such as thick hedgerows, overgrown rubble and abandoned fields. The North Area (Steamshovel Slough) and tidal marshes in the South, Isthmus and Central Areas may provide potentially suitable wintering habitat. This species has been documented within the proposed program area during the various surveys and habitat assessments that have been conducted.

Tri-Colored Blackbird (*Agelaius tricolor*)

The tri-colored blackbird is listed under CESA as threatened and is a California Species of Special Concern. The tri-colored blackbird is a permanent resident of California and ranges from the Central Valley and from Sonoma County to San Diego County along the coast. Tri-colored blackbird nests in freshwater marshes typically dominated by cattails (*Typha* ssp.) or tules (*Scirpus* spp.) and forages in freshwater marshes and surrounding upland habitats habitat feeding on insects. Foraging habitat occurs in the proposed program area; however, there is no suitable breeding habitat present. This species was not observed within the program area during various biological surveys; however, according to ebird (https://ebird.org/home), this species was observed in the Central Area at the Marketplace Marsh in 2015.

White-Tailed Kite (*Elanus leucurus*)

The white-tailed kite is a state fully-protected species that occurs through much of California. In California, the white-tailed kite is a year-round resident in coastal and valley lowlands. It prefers open habitats including grasslands, open shrub, agricultural areas, wetlands dominated by grasses, fence rows and irrigation ditches adjacent to grazed lands, riparian, oak woodlands, coastal sage scrub, and salt marsh. White-tailed kites were observed foraging in the program area and there is suitable foraging habitat throughout the South, Isthmus, Central and North Areas. There is little suitable habitat for nesting (i.e., dense tree/chaparral canopy) within the proposed program area.

Yellow-Breasted Chat (*Icteria virens*)

The yellow-breasted chat is a California Species of Special Concern. The yellow-breasted chat is an uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada. Yellow-breasted chat nests and forages in willows and other low, dense riparian habitat feeding on insects. Foraging habitat occurs in the Isthmus Area. Breeding habitat is absent due to

the small size and composition of the riparian habitat. Yellow-breasted chat has been observed throughout the site during surveys and may forage within freshwater riparian habitats within the South, Isthmus, Central and North Areas.

Special-Status Wildlife with Potential to Occur

The following special-status wildlife species have been noted as having potential to occur within at least one of the four areas.

Invertebrates

Mimic Tryonia (*Tryonia imitator*)

The mimic tryonia is a small brackish water snail that is listed on the International Union for the Conservation of Nature (IUCN) Red List as DD (data deficient), which means there is inadequate data to make a direct or indirect assessment. The mimic tryonia's known range is not well documented. However, it likely extends along the entirety of the California coast, but only in suitable localities within this range that include areas with brackish waters. Suitable habitat for this species occurs within brackish areas within the South, Isthmus, Central, and North Areas. Focused surveys were not performed for this species; however, it is expected to occur throughout the proposed program area where suitable habitat is present.

Monarch Butterfly (*Danaus plexippus*)

The monarch butterfly is a candidate for listing under FESA. It is a large orange and black butterfly; whose flight season extends from late February to mid-September. The monarch butterfly's known range extends along the California coast from the cape region of Baja California to Mendocino County. In the spring, they move inland in search of areas containing their primary host plant, milkweed. The species roosts in tree groves along the coast of California during the winter. Suitable overwintering habitat for this species occurs within the South, Isthmus, Central and North Areas within tree groves. Focused surveys were not performed for this species; however, it may occur throughout the proposed program area where suitable roosting habitat is present.

Sandy Beach Tiger Beetle (*Cicindela hirticollis gravida*), Senile Tiger Beetle (*Cicindela senilis frosti*), Western Beach Tiger Beetle (*Cicindela latesignata latesignata*), and Wester Tidal-Flat Tiger Beetle (*Cicindela gabbii*)

The sandy beach tiger beetle, senile tiger beetle, western beach tiger beetle and western tidal-flat tiger beetle are closely related insects that have similar habitat preferences and are therefore discussed simultaneously. All four species of tiger beetle are considered locally rare, though they are not a state- or federally-listed species or a California Species of Special Concern. These predatory beetles inhabit mudflats and salt pannes where they make burrows in the intertidal zone. Suitable habitat for these species occur within the North Area (Steamshovel Slough), as well as, tidal marsh areas in the South Area, Isthmus Area, and Central Area. These species have not been documented within the proposed program area during the various surveys and habitat assessments that have been conducted.

Fish

Steelhead – Southern California DPS (*Oncorhynchus mykiss irideus* pop. 10)

The Southern California steelhead is listed under FESA as endangered. This species is generally found in south coast flowing waters. Known occurrences for the species are very limited within the region. The nearest known records for the species occur in 2013 in the Santa Ana River (Orange County) and 1972 in Aliso Creek (Orange County) respectively (CDFW 2019). This species has a low to moderate potential to occur within the North Area (Steamshovel Slough) and Central Area (San Gabriel River) although focused fish surveys have not been completed in program area.

Tidewater Goby (*Eucyclobobius newberryi*)

The tidewater goby is listed under CESA and FESA as endangered. This species is generally found in fairly shallow waters (except when migrating) in coastal lagoons and estuaries where brackish conditions occur. Known occurrences for the species are very limited within the region and tend to consist of old records. The nearest known records for the species occur in 1996 in Aliso Creek (Orange County) and 1995 in Malibu Creek (Los Angeles County) respectively (CDFW 2019). This species has a moderate potential to occur within the North Area (Steamshovel Slough), Central Area (San Gabriel River), Isthmus Area (Zedler Marsh) and South Area although focused fish surveys have not been completed in program area.

Amphibians

Baja California treefrog (*Pseudacris hypochondriaca*) has been reported within the program area (Tidal Influence 2012); however, special-status amphibian species were not determined to have potential to occur within the program boundary.

Reptiles

The following special-status wildlife species (reptiles) have been noted as having potential to occur within at least one of the four areas.

Coast Horned Lizard (*Phrynosoma blainvilli*)

The coast horned lizard is a California Species of Special Concern. The coast horned lizard occurs throughout much of the state in valley-foothill hardwood, conifer and riparian habitats, as well as in pine-cypress, juniper and annual grassland habitats. Coast horned lizard forage primarily on ants but will consume other small insects. Foraging habitat occurs in the South Area, Isthmus Area, Central Area and North Area although the food source for the species is limited due to the abundance of the Argentine ant (*Linepithema humile*) which negatively affect coast horned lizard and displace favored and beneficial native ant species. Coast horned lizard has not been observed on site and may forage within upland habitats.

Coastal Whiptail (*Aspidoscelis tigris stejnegeri*)

The coastal whiptail is a California Species of Special Concern. The coastal whiptail occurs in deserts and semi-arid areas with sparse vegetation and open areas as well as in woodland and riparian habitats. Coastal whiptail forage on a number of invertebrates including grasshoppers, beetles, ants, termites and spiders. Foraging habitat occurs in the South Area, Isthmus Area,

Central Area and North Area. Coastal whiptail has not been observed on site and may forage within upland habitats.

Orange-Throated Whiptail (*Aspidoscelis hyperythra*)

The orange-throated whiptail is a California Species of Special Concern. The orange-throated whiptail occurs in the coastal zone west of the crest of Peninsular Ranges from Orange and southern San Bernardino Counties to San Diego County and in northern Baja California in open areas within coastal scrub, chaparral, and valley-foothill hardwood habitats. Orange-throated whiptail forages primarily on small arthropods. Foraging habitat occurs in the South Area, Isthmus Area, Central Area and North Area. Orange-throated whiptail has not been observed on site and may forage within upland habitats.

Southern California Legless Lizard (*Anniella stebbinsi*)

The Southern California legless lizard is a California Species of Special Concern. The Southern California legless lizard occurs in the coastal zone south of the Transverse Ranges and west of the crest of Peninsular Ranges from southern Ventura and Los Angeles Counties to San Diego County and in northern Baja California. The species occurs in sandy or loose loamy soils under sparse vegetation. Southern California legless lizard forages primarily on small arthropods. Foraging habitat occurs in the South Area, Isthmus Area, Central Area and North Area. Southern California legless lizard has not been observed on site and may forage within upland habitats.

Western Pond Turtle (*Emys marmorata*)

The western pond turtle is a California Species of Special Concern. The western pond turtle is uncommon to common in suitable aquatic habitat throughout California, west of the Sierra-Cascade crest and absent from desert regions, except along the Mojave River and its tributaries in the Mojave Desert. It can be found within riparian and freshwater marsh habitats where it consumes both plant and wildlife including pond lilies, beetles and other aquatic invertebrates. Western pond turtle has not been documented on site; however, there is a moderate potential for occurrence within the freshwater marsh at the South, Central and North Areas.

Birds

American Peregrine Falcon (*Falco peregrinus anatum*)

The American peregrine falcon is a state endangered species, and was federally delisted in 1999. Northwestern populations are year-round residents from central Mexico to Alaska. American peregrine falcons forage in a variety of habitats including grasslands, meadows, coastlines and wetlands where they hunt waterfowl and shorebirds. Organochlorine pesticides were a primary cause for decline before they were banned in the 1970s, but habitat loss due to development and human disturbance is also responsible for this raptor's decline. Habitat for prey occurs over much of the South, Isthmus, Central, and North Areas; however, the tidal salt marsh areas such as Steamshovel Slough exhibit the best foraging areas due to the highest concentrations of potential prey. No American peregrine falcons were observed on site during any surveys or site visits; however, residents in the vicinity and/or migrants are expected to forage occasionally on site.

California Black Rail (*Laterallus jamaicensis coturniculus*)

The California black rail is a state threatened species and California Fully Protected species. The California black rail is a year-long resident of saline, brackish, and fresh emergent wetlands in the San Francisco Bay area, Sacramento-San Joaquin Delta, coastal Southern California at Morro Bay and a few other locations. Inland locations include the Salton Sea and lower Colorado River area. California black rail occurs most commonly in tidal emergent wetlands dominated by pickleweed, or in brackish marshes supporting bulrushes in association with pickleweed. In freshwater, California black rail is usually found in bulrushes, cattails, and saltgrass. California black rails forage on small invertebrates and seeds within wetland habitats. Breeding and foraging habitat occurs in the South Area, Isthmus Area, Central Area, and North Area. California black rail has not been observed on site during surveys; however, this species may forage within the North Area (Steamshovel Slough) and other tidal marshes within the South, Isthmus and Central Areas.

Coastal California Gnatcatcher (*Polioptila californica californica*)

The coastal California gnatcatcher is a federally listed threatened species and California Species of Special Concern. This species is a resident subspecies that occurs in arid coastal scrub below about 500 meters (1,500 feet) from eastern Ventura County to San Diego County and into Baja California, Mexico. The coastal California gnatcatcher is entirely dependent on coastal scrub habitats for nesting and foraging. Limited foraging and nesting habitat occurs in upland areas within the South Area, Isthmus Area, Central Area, and North Area. Coastal California gnatcatcher has not been observed on site.

Southern California Rufous-Crowned Sparrow (*Aimophila ruficeps canescens*)

The Southern California rufous-crowned sparrow is a California watch list species. This species is a resident subspecies that occurs in arid coastal scrub and chaparral in Southern California. The Southern California rufous-crowned sparrow is entirely dependent on coastal scrub and chaparral habitats for nesting and foraging. Limited foraging and nesting habitat occurs in upland areas within the South, Isthmus, Central, and North Areas. Southern California rufous-crowned sparrow has not been observed on site.

Ridgway's Rail (*Rallus obsoletus*)

The Ridgway's rail (formerly designated as the light-footed clapper rail) is a federal endangered, state endangered, and California fully protected species. In Southern California, the Ridgway's rail is a year-round resident that prefers coastal salt marshes, but also inhabits freshwater marshes. Cordgrass (*Spartina* spp.) and bulrush (*Bolboshchoenus* spp. and *Schoenoplectus* spp.) are among the preferred species for nesting. The North Area (Steamshovel Slough) and tidal marsh within the South, Isthmus and Central Areas exhibit the highest potential for supporting this species; this species has not been documented within the restoration program area during the various surveys and habitat assessments that have been conducted.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*)

The southwestern willow flycatcher is listed under CESA as threatened and under FESA as endangered. The southwestern willow flycatcher is a rare, local summer resident in Southern California. Southwestern willow flycatcher nests and forages in willows and other low, dense riparian

habitat feeding on insects. Foraging habitat occurs in the Isthmus Area. Suitable breeding habitat is limited due to the relatively small amount and composition of tree riparian habitat that is present. Moreover, southwestern willow flycatcher has not been observed within the proposed program area (including the Isthmus Area), but may forage within freshwater riparian habitats in the vicinity.

~~**Tri-Colored Blackbird (*Agelaius tricolor*)**~~

~~The tri-colored blackbird is listed under CESA as threatened and is a California Species of Special Concern. The tri-colored blackbird is a permanent resident of California and ranges from the Central Valley and from Sonoma County to San Diego County along the coast. Tri-colored blackbird nests in freshwater marshes typically dominated by cattails (*Typha* ssp.) or tules (*Scirpus* spp.) and forages in freshwater marshes and surrounding upland habitats habitat feeding on insects. Foraging habitat occurs in the proposed program area; however, there is no suitable breeding habitat present. This species has not been observed within the program area during various biological surveys~~

Western Snowy Plover (*Charadrius alexandrinus nivosus*)

The western snowy plover is listed as federally endangered and is a California Species of Special Concern that nests on coastal beaches from southern Washington to southern Baja California, Mexico. The breeding season extends from March through September. Nests occur in flat, open areas with sandy substrates without much vegetation. The western snowy plover forages on invertebrates along the shore and along the edges of salt marshes. Habitats used by this species include sandy coastal beaches, salt pannes, coastal dredged spoils sites, dry salt ponds, salt pond levees, gravel bars, salt marshes, and lagoons. Major threats are loss of suitable nesting habitat and, where habitat remains, disturbance from human activity near nesting sites, including general maintenance practices necessary to maintain beaches and recreational activity. The western snowy plover has not been observed, but potential foraging occurs on the mudflats within the South, Isthmus, Central, and North Areas. Suitable breeding areas for western snowy plover occur on salt flats within the Central Area.

Yellow Rail (*Coturnicops noveboracensis*)

The yellow rail is a California Species of Special Concern. The yellow rail is a year-round resident that prefer freshwater marshes in northern and eastern California. Sedges (*Carex* spp. and *Dulichum* spp.), bulrush (*Scirpus* spp.), rush (*Juncus* spp.) and reedgrasses (*Calamagrostis* spp.) are among the preferred species for nesting. The freshwater marsh at the South, Central and North Areas exhibit the highest potential for supporting this species; this species has not been documented within the proposed program area during the various surveys and habitat assessments that have been conducted.

Yellow Warbler (*Dendroica petechia brewsteri*)

The yellow warbler is a California Species of Special Concern. The yellow warbler is an uncommon summer resident and migrant in coastal California and in foothills of the Sierra Nevada and eastern California from Lake Tahoe through Inyo County. Yellow warbler nests and forages in riparian deciduous habitats containing cottonwoods, willows, alders and other small trees and shrubs feeding on insects and spiders. Foraging habitat occurs in the Isthmus Area. Breeding habitat is absent due to the small size and composition of the riparian habitat. Yellow

warbler has not been documented within the proposed program area during the various surveys and habitat assessments that have been conducted.

Mammals

Pacific Pocket Mouse (*Perognathus longimembris pacificus*)

The Pacific pocket mouse is a federal endangered species and California Species of Special Concern. Pacific pocket mouse is a rare resident and is associated with fine grain, sandy substrates in coastal strand, coastal dunes, river alluvium and coastal sage scrub habitats within approximately 2.5 miles of the ocean in Southern California. The species primarily feeds on seeds. Suitable habitat occurs in the South, Isthmus, and Central Area, as well as in the North Areas within Steamshovel Slough (and other tidal areas). Pacific pocket mouse has not been observed on site, and has a low potential to be present, since there are no records of the species in Los Angeles County since 1938 and the closest population occurs in the Dana Point headlands located approximately 30 miles to the southeast (USFWS 2010).

South Coast Marsh Vole (*Microtus californicus stephensi*)

The south coast marsh vole is a California Species of Special Concern, and ranges from southwestern Oregon through much of California. This species prefers grassy meadow habitats and feeds on grasses and other green vegetation when available; piles of cuttings are found along its runways. It breeds from September to December. In winter, it eats mostly roots and other underground parts of plants. Major threats are non-native plants that have replaced the plants it needs to survive and introduced non-native animals such as the common house mouse and other non-natives that have displaced it through competition. The salt marsh areas in the North Area (Steamshovel Slough) and South, Isthmus and Central Areas provide suitable habitat for this species.

Southern California Salt Marsh Shrew (*Sorex ornatus salicornicus*)

The Southern California salt marsh shrew is a California Species of Special Concern that is endemic to Southern California's coastal marshes from Point Mugu, Ventura County to salt marshes around Anaheim Bay and Newport Beach in Orange County. This species appears to prefer coastal marshes. Based on studies of other similar shrews, the Southern California salt marsh shrew likely requires fairly dense ground cover, nesting sites above mean high tide free from inundation, and fairly moist surroundings. Major threats are loss of habitat due to development along the coast, and lack of refuge sites above the marshes to escape from flooding during seasonal high tides and periodic storms. The salt marsh areas in the North Area (Steamshovel Slough), South, Isthmus, and Central Areas provide suitable habitat for this species.

Western Mastiff Bat (*Eumops perotis californicus*)

The western mastiff bat is a California Species of Special Concern. Western mastiff bat is an uncommon resident in southeastern San Joaquin Valley and Coastal Ranges from Monterey County southward through Southern California, from the coast eastward to the Colorado Desert. Western mastiff bat occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban areas where it feeds on insects. Western mastiff bat roosts in rock crevices, trees and buildings. The South Area, Isthmus Area, Central Area, and North Area

provide suitable foraging habitat. Roosting may occur in the palm trees that are located within the proposed program area.

Western Yellow Bat (*Lasiurus xanthinus*)

The western yellow bat is a California Species of Special Concern. Western yellow bat is an uncommon resident known only in Los Angeles and San Bernardino Counties south to the Mexican border. Western yellow bat occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats where it feeds on insects. Western yellow bat roosts in trees. The South, Isthmus, Central and North Areas provide suitable foraging habitat. Roosting may occur in the palm trees that are located within the proposed program area.

Table 3.3-6, *Special-Status Wildlife with Potential to Occur within the Program Area*, provides a summary of all special-status wildlife species determined to be present or to have potential to occur within each of the four program areas.

TABLE 3.3-6
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR WITHIN THE PROGRAM AREA

Species	South Area	Isthmus Area	Central Area	North Area
Invertebrates				
Mimic tryonia (California brackish water snail)	H	H	H	H
Monarch—California overwintering population	H	H	H	H
Mudflat tiger beetle	H	H	H	P
Salt marsh tiger beetle	H	P	H	P
Salt marsh wandering skipper	P	P	P	P
Sandy beach tiger beetle	H	H	H	H
Senile tiger beetle	H	H	H	H
Western beach tiger beetle	H	H	H	H
Western tidal-flat tiger beetle	H	H	H	H
Fish				
Steelhead – Southern California DPS			H	H
Tidewater goby	H	H	H	H
Reptiles				
Coast horned lizard	H	H	H	H
Coastal whiptail	H	H	H	H
Orange-throated whiptail	H	H	H	H
Pacific green sea turtle	P		P	P
Red diamond rattlesnake	P	P	P	P
Southern California legless lizard	H	H	H	H
Western pond turtle	H		H	H
Birds				
American peregrine falcon	P	P	P	P
Belding's savannah sparrow	P	P	H	P

TABLE 3.3-6
SPECIAL-STATUS WILDLIFE WITH POTENTIAL TO OCCUR WITHIN THE PROGRAM AREA

Species	South Area	Isthmus Area	Central Area	North Area
Black skimmer	P		P	P
Burrowing owl	H	P	H	H
California black rail	H	H	H	H
California Brown Pelican	P	P	P	P
California least tern	P	P	P	P
Coastal California gnatcatcher	H	H	H	H
Least Bell's vireo		P	H	H
Loggerhead shrike	P	P	P	P
Merlin	H	H	H	P
Northern harrier	P	P	P	P
Osprey	P	P	P	P
Ridgway's rail	H	H		H
Short-eared owl	H	H	P	P
Southern California rufous-crowned sparrow	H	H	H	H
Southwestern willow flycatcher		H	H	H
Tri-colored blackbird	H	H	P~~H~~	H
Western snowy plover	H	H	H	H
White-tailed kite	P	P	P	P
Yellow rail	H		H	H
Yellow warbler		H		
Yellow-breasted chat	P	P	P	P
Mammals				
Pacific pocket mouse	H	H	H	H
South coast marsh vole	H	H	H	H
Southern California salt marsh shrew	H	H	H	H
Western mastiff bat	H	H	H	H
Western yellow bat	H	H	H	H

H = habitat present; P = species present

3.3.2.6 Common Wildlife

Birds

The program area supports a wide range of avifauna, both residents and migrants as well as a high diversity of wintering waterfowl and shore birds including those listed in **Table 3.3-7**, *Common Birds Observed within the Los Cerritos Wetlands Program Area*.

TABLE 3.3-7
COMMON BIRDS OBSERVED WITHIN THE LOS CERRITOS WETLANDS PROGRAM AREA

Species	Species	Species
Allen's Hummingbird *Selasphorus sasin*	Common Raven *Corvus corax*	Orange Bishop *Euplectes franciscanus*
American Avocet *Recurvirostra americana*	Common Yellowthroat *Geothlypis trichas*	Pacific Loon *Gavia pacifica*
American Bittern *Botaurus lentiginosus*	Cooper's Hawk *Accipiter cooperii*	Pacific-slope Flycatcher *Empidonax difficilis*
American Coot *Fulica americana*	Double-crested Cormorant *Phalacrocorax auritus*	Pied-billed Grebe *Podilymbus podiceps*
American Crow *Corvus brachyrhynchos*	Downy Woodpecker *Picoides pubescens*	Red-breasted Merganser *Mergus serrator*
American Goldfinch *Spinus tristis*	Eared Grebe *Podiceps nigricollis*	Reddish Egret *Egretta refescens*
American Kestrel *Falco sparverius*	Elegant Tern *Thalasseus elegans*	Red-necked Phalarope *Phalaropus lobatus*
American Pipit *Anthus rubescens*	European Starling *Sturnus vulgaris*	Red-shouldered Hawk *Buteo lineatus*
American White Pelican *Pelecanus erythrorhynchos*	Forster's Tern *Sterna forsteri*	Red-tailed Hawk *Buteo jamaicensis*
American Widgeon *Anas Americana*	Gadwall *Anas strepera*	Red-winged Blackbird *Agelaius phoeniceus*
Anna's Hummingbird *Calypte anna*	Great Blue Heron *Ardea herodias*	Ring-billed Gull *Larus delawarensis*
Ash-throated Flycatcher *Myiarchus cinerascens*	Great Egret *Ardea alba*	Rock Pigeon *Columba livia*
Barn Owl *Tyto alba*	Great Horned Owl *Bubo virginianus*	Ruby-crowned Kinglet *Regulus calendula*
Barn Swallow *Hirundo rustica*	Greater Scaup *Aythya marila*	Ruddy Duck *Oxyura jamaicensis*
Belted Kingfisher *Megaceryle alcyon*	Greater Yellowlegs *Tringa semipalmatus*	Say's Phoebe *Sayornis saya*
Black Phoebe *Sayornis nigricans*	Great-tailed Grackle *Quiscalus mexicanus*	Semipalmated Plover *Charadrius semipalmatus*
Black-bellied Plover *Pluvialis squatarola*	Green Heron *Butorides virescens*	Short-billed Dowitcher *Limnodromus griseus*
Black-chinned Hummingbird *Archilochus alexandri*	Green-winged Teal *Anas crecca*	Snowy Egret *Egretta thula*
Black-crowned Night-heron *Nycticorax*	Heermann's Gull *Larus heermanni*	Song Sparrow *Melospiza melodia*
Black-headed Grosbeak *Pheucticus melanocephalus*	Hermit Thrush *Catharus guttatus*	Sora *Porzana Carolina*
Black-necked Stilt *Himantopus mexicanus*	Hooded Oriole *Icterus cucullatus*	Spotted Sandpiper *Actitis macularia*
Blue-gray Gnatcatcher *Polioptila caerulea*	Horned Grebe *Podiceps auritus*	Surf Scoter *Melanitta perspicillata*
Blue-winged Teal *Anas discors*	House Finch *Haemorhous mexicanus*	~~Turkey Vulture~~Tri-colored blackbird ~~*Cathartes aura*~~ *Agelaius tricolor*
Bonaparte's Gull *Larus philadelphia*	House Wren *Troglodytes aedon*	Turkey Vulture *Cathartes aura*~~Violet-green Swallow~~ ~~*Tachycineta thalassina*~~

TABLE 3.3-7
COMMON BIRDS OBSERVED WITHIN THE LOS CERRITOS WETLANDS PROGRAM AREA

Species	Species	Species
Brant *Branta bernicla*	Killdeer *Charadrius vociferus*	Violet-green Swallow *Tachycineta thalassina*~~Western Bluebird~~ ~~*Sialia mexicana*~~
Brewer's Blackbird *Euphagus cyanocephalus*	Least Sandpiper *Calidris minutilla*	Western Bluebird *Sialia mexicana*~~Western Grebe~~ ~~*Aechmorphus occidentalis*~~
Bufflehead *Bucephala albeola*	Lesser Goldfinch *Spinus psaltria*	Western Grebe *Aechmorphus occidentalis*~~Western Gull~~ ~~*Larus occidentalis*~~
Bullock's Oriole *Icterus bullockii*	Lesser Scaup *Aythya affinis*	Western Gull *Larus occidentalis*~~Western Kingbird~~ ~~*Tyrannus verticalis*~~
California Gull *Larus californicus*	Long-billed Curlew *Numenius americanus*	Western Kingbird *Tyrannus verticalis*~~Western Meadowlark~~ ~~*Sturnella neglecta*~~
California Towhee *Melozone crissalis*	Long-billed Dowitcher *Limnodromus scolopaceus*	Western Meadowlark *Sturnella neglecta*~~Western Sandpiper~~ ~~*Calidris mauri*~~
Canada Goose *Branta canadensis*	Mallard *Anas platyrhynchos*	Western Sandpiper *Calidris mauri*~~Western Scrub-jay~~ ~~*Aphelocoma californica*~~
Caspian Tern *Hydroprogne caspia*	Marbled Godwit *Limosa fedosa*	Western Scrub-jay *Aphelocoma californica*~~Whimbrel~~ ~~*Numenius phaeopus*~~
Cassin's Kingbird *Tyrannus vociferans*	Marsh Wren *Cistothorus palustris*	Whimbrel *Numenius phaeopus*~~White-crowned Sparrow~~ ~~*Zonotrichia leucophrys*~~
Cedar Waxwing *Bombycilla cedrorum*	Mourning Dove *Zenaida macroura*	White-crowned Sparrow *Zonotrichia leucophrys*~~Willet~~ ~~*Tringa semipalmatus*~~
Cinnamon Teal *Anas cyanoptera*	Northern Flicker *Colaptes auratus*	Willet *Tringa semipalmatus*~~Wilson's Phalarope~~ ~~*Phalaropus tricolor*~~
Clark's Grebe *Aechmorphus clarkii*	Northern Mockingbird *Mimus polyglottos*	Wilson's Phalarope *Phalaropus tricolor*~~Wilson's Warbler~~ ~~*Cardellina pusilla*~~
Cliff Swallow *Petrochelidon pyrrhonota*	Northern Pintail *Anas acuta*	Wilson's Warbler *Cardellina pusilla*~~Wilson's Snipe~~ ~~*Gallinago delicata*~~
Common Loon *Gavia immer*	Northern Rough-winged Swallow *Stelgidopteryx serripennis*	Wilson's Snipe *Gallinago delicata*~~Yellow-rumped Warbler~~ ~~*Setophaga coronate*~~
Common Poorwill *Phalaenoptilus nuttallii*	Northern Shoveler *Anas clypeata*	Yellow-rumped Warbler *Setophaga coronate*

SOURCES: Glenn Lukos Associates Inc., 2017a; Coastal Restoration Consultants, 2019.

Mammals

Mammals detected in the proposed program area, either by direct observation or by physical evidence, include coyote (*Canis latrans*), domestic dog (*Canis lupus familiaris*), American opossum (*Didelphis virginiana*), house mouse (*Mus musculus*), harbor seal (*Phoca citulina*), raccoon (*Procyon lotor*), western harvest mouse (*Reithrodontomys megalotis limicola*), California ground squirrel (*Spermophilus beechyi*), Audubon's cottontail (*Sylvilagus audubonii*), brush rabbit (*Sylvilagus bachmani*), Botta's pocket gopher (*Thomomys bottae*) and California sea lion (*Zalophus californianus*).

Reptiles and Amphibians

Herpetofauna observed in the proposed program area include California toad (*Anaxyrus boreas halophilus*), garden slender salamander (*Batrachoseps major major*), southern alligator lizard (*Elgaria multicarinata*), California kingsnake (*Lampropeltis californiae*), gopher snake (*Pituophis catenifer*), western fence lizard (*Sceloporus occidentalis*), Baja California treefrog (*Pseudacris hypochondriaca*) and side-blotched lizard (*Uta stansburiana*).

Marine Fish

Marine fish observed in the proposed program area include topsmelt (*Atherinops affinis*), arrow goby (*Clevelandia ios*), California killifish (*Fundulus parvipinnis*), staghorn sculpin (*Leptocottus armatus*), striped mullet (*Mugil cephalus*), bay pipefish (*Synganthus leptorhynchus*), and round sting ray (*Urobatis haleri*). In addition, northern anchovy (*Engraulis mordax*), Pacific sardine (*Sardinops sagax*), Pacific mackerel (*Scomber japonicas*), and jack mackerel (*Trachurus symmetricus*), are common in nearshore ocean waters and could swim into the channels in the Project area.

3.3.2.7 Sensitive Natural Communities

Sensitive natural communities are of limited distribution statewide or within a county or region. These communities may or may not contain special-status species or their habitat, and are independently considered sensitive by CDFW. For purposes of this PEIR, sensitive natural communities include vegetation communities identified in the List of Natural Communities with Holland Types (CDFW 2018a) with a CNDDB state rank of S1, S2, or S3, as provided in **Table 3.3-8**, *Sensitive Natural Communities Observed within the Los Cerritos Wetlands Program Area*.

TABLE 3.3-8
SENSITIVE NATURAL COMMUNITIES OBSERVED WITHIN THE LOS CERRITOS WETLANDS PROGRAM AREA

Sensitive Natural Community	CNDDB State Rank	South Area	Isthmus Area	Central Area	North Area
Anemopsis californica – Helianthus nuttallii – Solidago spectabilis Herbaceous Alliance	S2			X	
Arthrocnemum subterminale Herbaceous Alliance	S3	X	X	X	X
Baccharis salicina Provisional Shrubland Alliance	S2		X		X
Cressa truxillensis – Distichlis spicata Herbaceous Alliance	S2	X	X	X	X
Frankenia salina Herbaceous Alliance	S3	X	X	X	X
Isocoma menziesii Shrubland Alliance	S3	X	X	X	X
Leymus cinereus – Leymus triticoides Herbaceous Alliance	S3			X	
Salicornia pacifica Herbaceous Alliance	S3	X	X	X	X
Salix gooddingii Woodland Alliance	S3			X	X
Schoenoplectus californicus – Typha (*angustifolia*, *domingensis*, *latifolia*) Herbaceous Alliance	S3			X	
Schoenoplectus californicus (*acutus*, *californicus*) Herbaceous Alliance	S3			X	
Spartina foliosa Herbaceous Alliance	S3.2				X

CNDDB State Rank

S1: Critically Imperiled – Critically imperiled in the state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

S2: Imperiled – Imperiled in the state because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the nation or state. S3: Vulnerable -— Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

S3: Vulnerable — Vulnerable in the state due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.

3.3.2.8 Potential Environmentally Sensitive Habitat Areas

The proposed program has the potential to impact areas that could potentially meet the definition for ESHA as defined under the CCA. The CCA protects important coastal biological resources including wetlands, riparian habitats, and other areas defined as ESHA by the CCC in accordance with the CCA. The CCA Section 30107.5 defines an ESHA as:

> *"… any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."*

For purposes of this PEIR, criteria used to determine extent of potential ESHA are as follows:

- The habitat consists of predominantly native vegetation that supports or is likely to support state- or federally listed threatened or endangered animal species, California Fully Protected species, or other special-status animal species (e.g., listed by CDFW as Species of Special Concern or have a CNDDB state rank of S1, S2, or S3);

- The habitat consists of predominantly native vegetation that supports or is likely to support state- or federally listed threatened or endangered plant species or species designated as 1B or 2B by the CRPR; or
- The native vegetation alliance has a rarity ranking of S1, S2, or S3 by the CNDDB.

Based on the criteria identified above, the habitats listed below have been documented in the proposed program area and have the potential to be considered ESHA, because of their potential to support one of more of the following special-status species: western snowy plover, American peregrine falcon, white-tailed kite, Belding's savannah sparrow, least Bell's vireo, California least tern, Pacific green sea turtle, Coulter's goldfields, estuary seablite and southern tarplant.

- *Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance (S2)
- *Arthrocnemum subterminale* Herbaceous Alliance (S2)
- *Baccharis salicina* Provisional Shrubland Alliance (S2)
- *Cressa truxillensis – Distichlis spicata* Herbaceous Alliance (S2)
- *Distichlis littoralis* Herbaceous Alliance (SNR)
- *Distichlis spicata* Herbaceous Alliance (S4)
- *Frankenia salina* Herbaceous Alliance (S3)
- *Isocoma menziesii* Shrubland Alliance (S3)
- *Leymus cinereus – Leymus triticoides* Herbaceous Alliance (S3)
- *Salicornia pacifica* Herbaceous Alliance (S3)
- *Salix gooddingii* Woodland Alliance (S3)
- *Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance (S3)
- *Schoenoplectus californicus* (*acutus, californicus*) Herbaceous Alliance (S3)
- *Spartina foliosa* Herbaceous Alliance (S3.2)
- *Ulva lactuca* algal mat (SNR)
- Tidal channel
- Unvegetated salt flat
- Unvegetated tidal flat

Table 3.3-9, *Potential Environmentally Sensitive Areas*, provides a summary of potential ESHA's within the proposed program area that have been confirmed based on various field surveys, as well as unconfirmed ESHA areas that have the potential to be present based on the presence of habitat characteristics and the potential for special-status species to be present, but were not surveyed. Furthermore, **Figure 3.3-3a**, *Environmentally Sensitive Habitat Areas – South Area*, through **Figure 3.3-3d**, *Environmentally Sensitive Habitat Areas – North Area*, depicts the extent of ESHA within the proposed program area.

TABLE 3.3-9
POTENTIAL ENVIRONMENTALLY SENSITIVE AREAS

ESHA Classification	South (acre)	Isthmus (acre)	Central (acre)	North (acre)	Total (acre)
Potential ESHA (confirmed)	69.64	17.20	69.09	43.03	**198.96**
Potential ESHA (unconfirmed)	54.39	0	0	2.68	**57.07**
Total	**124.03**	**17.20**	**69.09**	**45.71**	**256.03**

3.3.2.9 Critical Habitat/Essential Fish Habitat

The United States Fish and Wildlife Service (USFWS) has not designated critical habitat for any species listed as threatened or endangered within any portions of the proposed program area. Essential Fish Habitat (EFH), which is regulated by the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (NMFS) and includes bay, estuarine, and eelgrass habitats (Habitats of Particular Concern [HAPC]) occurs in the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel) (Tidal Influence 2012). Eelgrass, which is a food source for the federally-threatened Pacific green sea turtle, is considered a HAPC for this species. Conversely, the San Gabriel River and Haynes Cooling Channel do have connectivity with open water or marshes and provide movement corridors to fish, marine mammals, and reptiles; therefore, these waters provide EFH.

3.3.2.10 Potential Jurisdictional Resources

The South, Isthmus, Central, and North Areas each contain aquatic resources that potentially meet the definition of waters of the United States pursuant to Clean Water Act (CWA) Section 404. All potential waters of the United States associated with the individual areas are also considered waters of the state, and impacts would require a Water Quality Certification from the RWQCB pursuant to CWA Section 401. There does ~~are~~ not appear to be any "isolated" or "non-federal" waters that would be subject to waste discharge requirements under the Porter Cologne Water Quality Control Act ~~(~~GLA 2017b, CRC 2019); however, this will be verified at the project-level for each restoration area in accordance with Mitigation Measure BIO-10.

CDFW has not published specific guidance for delineating jurisdictional features within tidally influenced waters and habitats. The limits of potential CDFW jurisdiction within the program area were mapped to include open water and linear waters features, as well as the surrounding vegetation which "occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself" (CDFG ESD 1994). Therefore, all channels, sloughs and open water were mapped as potential CDFW jurisdictional areas, as well as the vegetation communities surrounding these waters that were determined to occur in the program area due to the presence and proximity of the waters. ~~For the purposes of this PEIR, potential CDFW jurisdictional areas are synonymous with CCC wetlands in the program area.~~

SOURCE: Mapbox, LCWA, CRC

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Figure 3.3-3a
Environmentally Sensitive Habitat Areas
South Area

ESA

SOURCE: Mapbox, LCWA, CRC

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Figure 3.3-3b
Environmentally Sensitive Habitat Areas
Isthmus Area

ESA

SOURCE: Mapbox, LCWA, CRC

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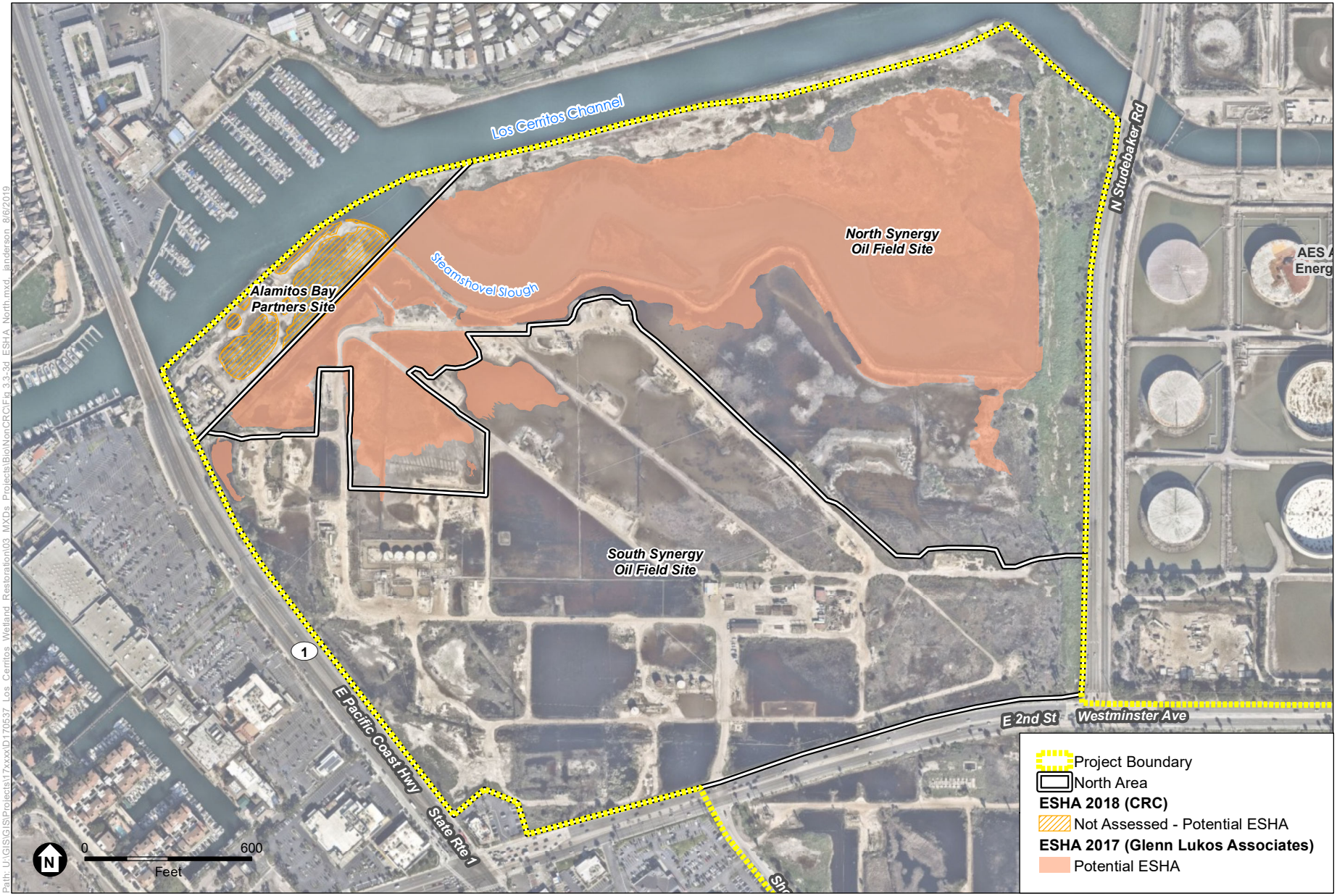
Figure 3.3-3c
Environmentally Sensitive Habitat Areas
Central Area

ESA



SOURCE: Mapbox, LCWA, CRC, Glenn Lukos Associates

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Figure 3.3-3d
Environmentally Sensitive Habitat Areas
North Area

ESA

The CCC has defined wetlands using the presence of a single criteria/parameter (i.e., wetland vegetation or hydric soils or wetland hydrology) as sufficient to make a presumptive finding for the presence of wetlands. As such, wetlands defined under the CCC are more extensive in the non-tidal areas of the site as compared to potential waters of the United States.

Portions of the South, Central, and North Areas are subject to Rivers and Harbors Act Section 10, and all four areas include "streams" potentially subject to CDFW jurisdiction pursuant to California Fish and Game Code Section 1602 and potential CCC wetlands pursuant to the CCA.

A summary of the jurisdictional resources is provided below for each area determined partially by on the results of a jurisdictional delineation and partially by the results of a jurisdictional assessment based on vegetation communities and hydrology (GLA 2017b, CRC 2019 [Appendix C1]). **Table 3.3-10**, *Potential Jurisdictional Waters within the Program Area*, provides a summary of potential federal jurisdictional waters which include those regulated by the USACE and RWQCB as well as potential state jurisdictional waters which include those regulated by CDFW and CCC.

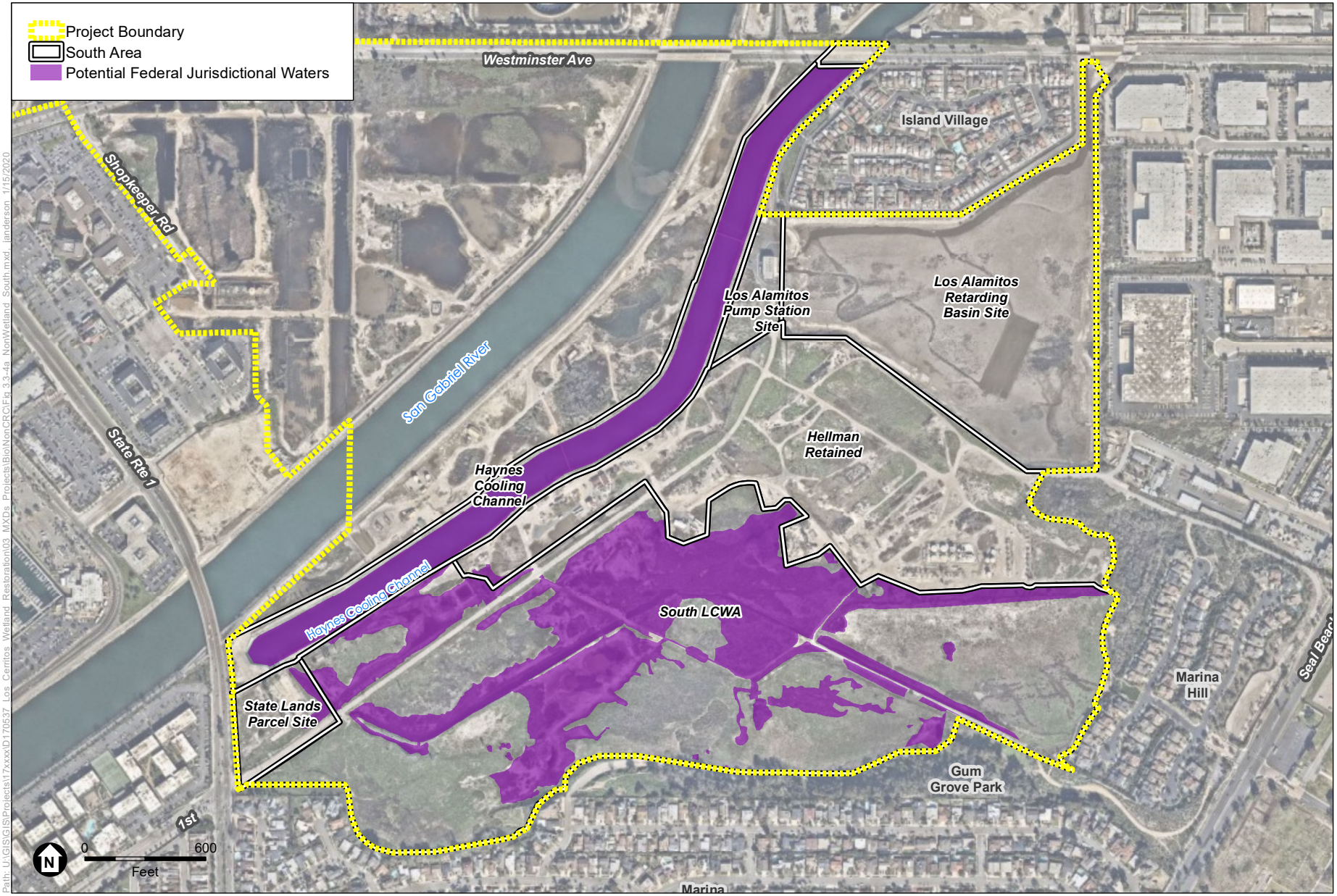
TABLE 3.3-10
POTENTIAL JURISDICTIONAL WATERS WITHIN THE PROGRAM AREA

Program Area	Potential Federal Jurisdictional Waters (acres)	Potential Section 10 Waters (acres)	Potential State Jurisdictional Waters (acres)	Potential CCC Jurisdictional Waters (acres)
South Area	52	47	54	54
Isthmus Area	9	0	11	12
Central Area	68	10	70	70
North Area	41	6	100	101
Total	**170**	**63**	**235**	**237**

Potential Federal Jurisdictional Waters

Areas potentially subject to USACE and RWQCB jurisdiction (waters of the United States and state-regulated waters, respectively) pursuant to CWA Sections 404 and 401 occur within the South, Isthmus, Central, and North Areas. Potential federal jurisdictional waters within the program area includes 170 acres. **Figure 3.3-4a**, *Potential Federal Jurisdictional Waters – South Area*, through **Figure 3.3-7b**, *Potential State Jurisdictional Waters – North Area*, depict the extent of potential federal jurisdictional waters in the program area. Approximately 57 acres were not assessed due to inaccessibility but may contain potentially jurisdictional waters of the United States.

The extent of potential state and CCC jurisdictional areas within the program area is shown in Figures 3.3-4a through 3.3-7b and is described below in its respective section.



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants

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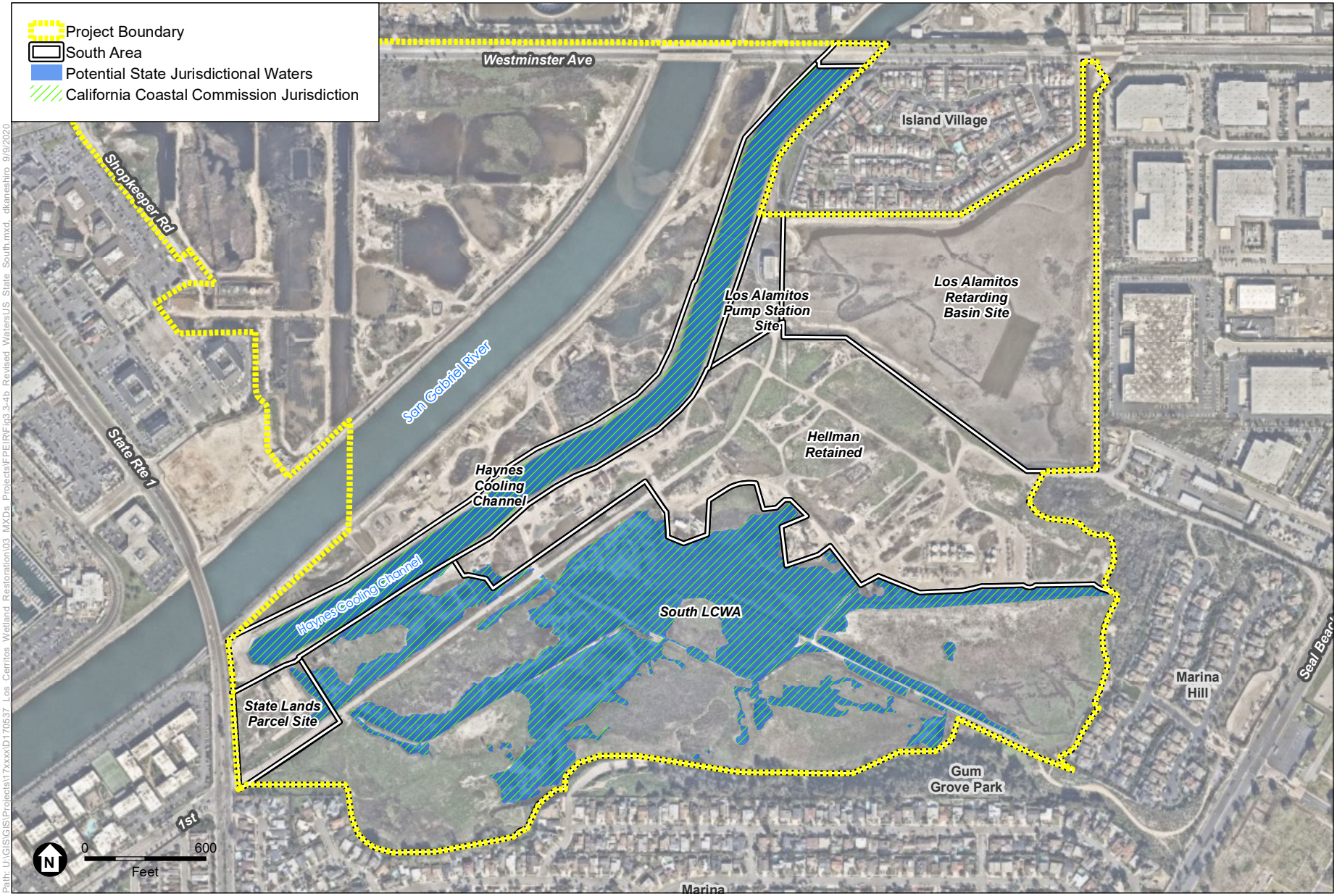
Figure 3.3-4a
Potential Federal Jurisdictional Waters
South Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants

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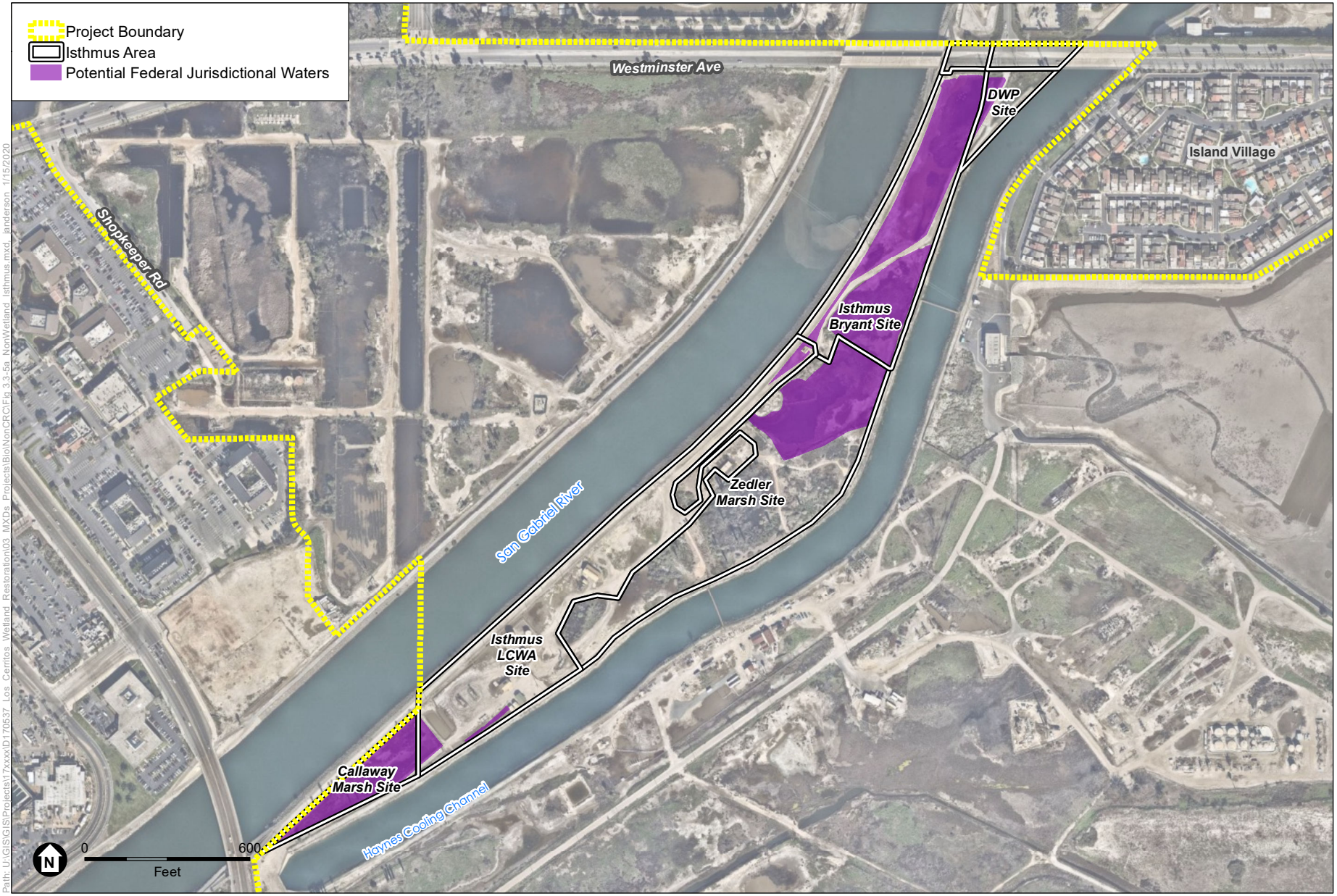
Figure 3.3-4b

Revised Potential State Jurisdictional Waters
South Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants

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Figure 3.3-5a
Potential Federal Jurisdictional Waters
Isthmus Area

ESA

SOURCE: Mapbox, LCWA, Coastal Restoration Consultants

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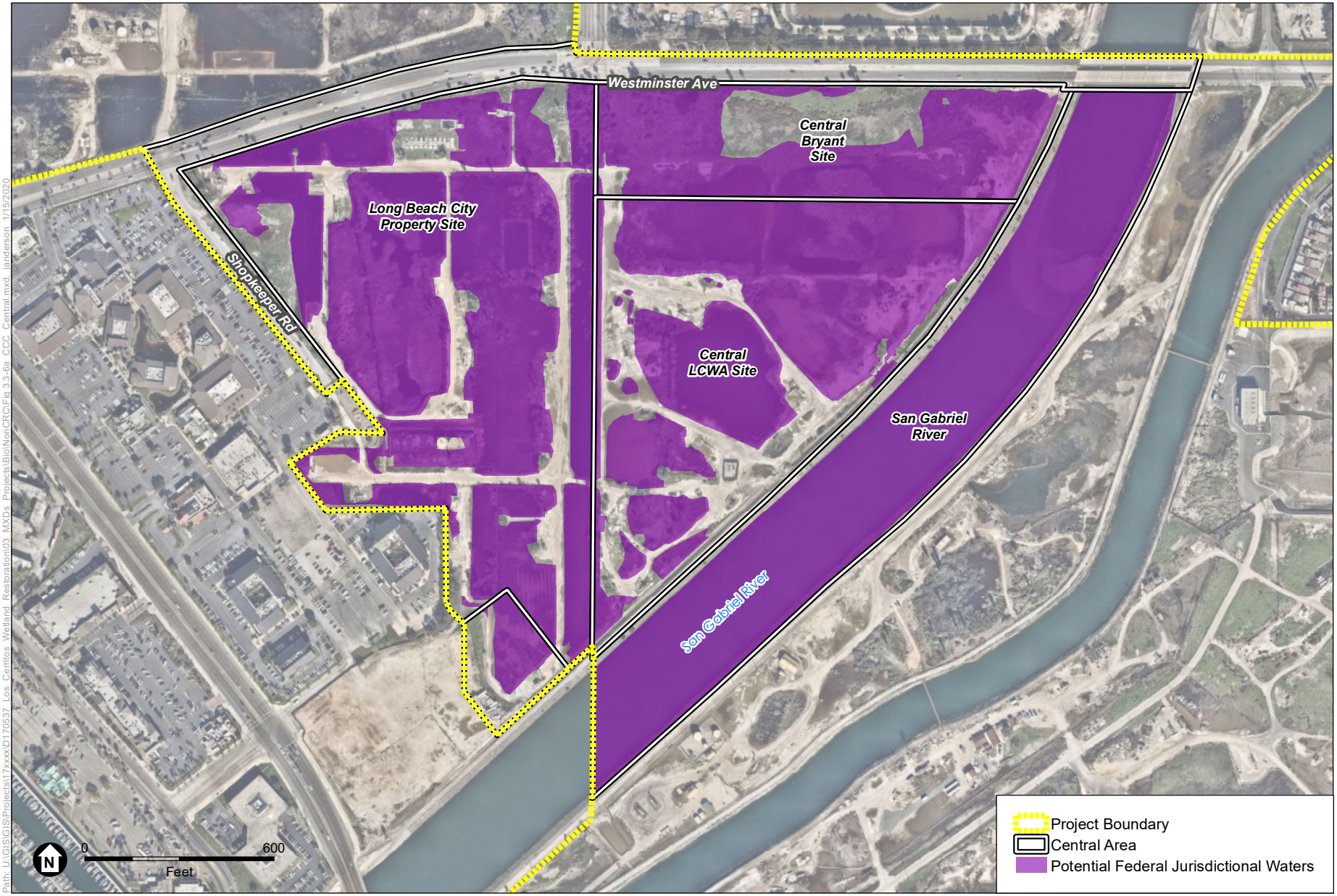
Figure 3.3-5b

Revised Potential State Jurisdictional Waters
Isthmus Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Glenn Lukos Associates

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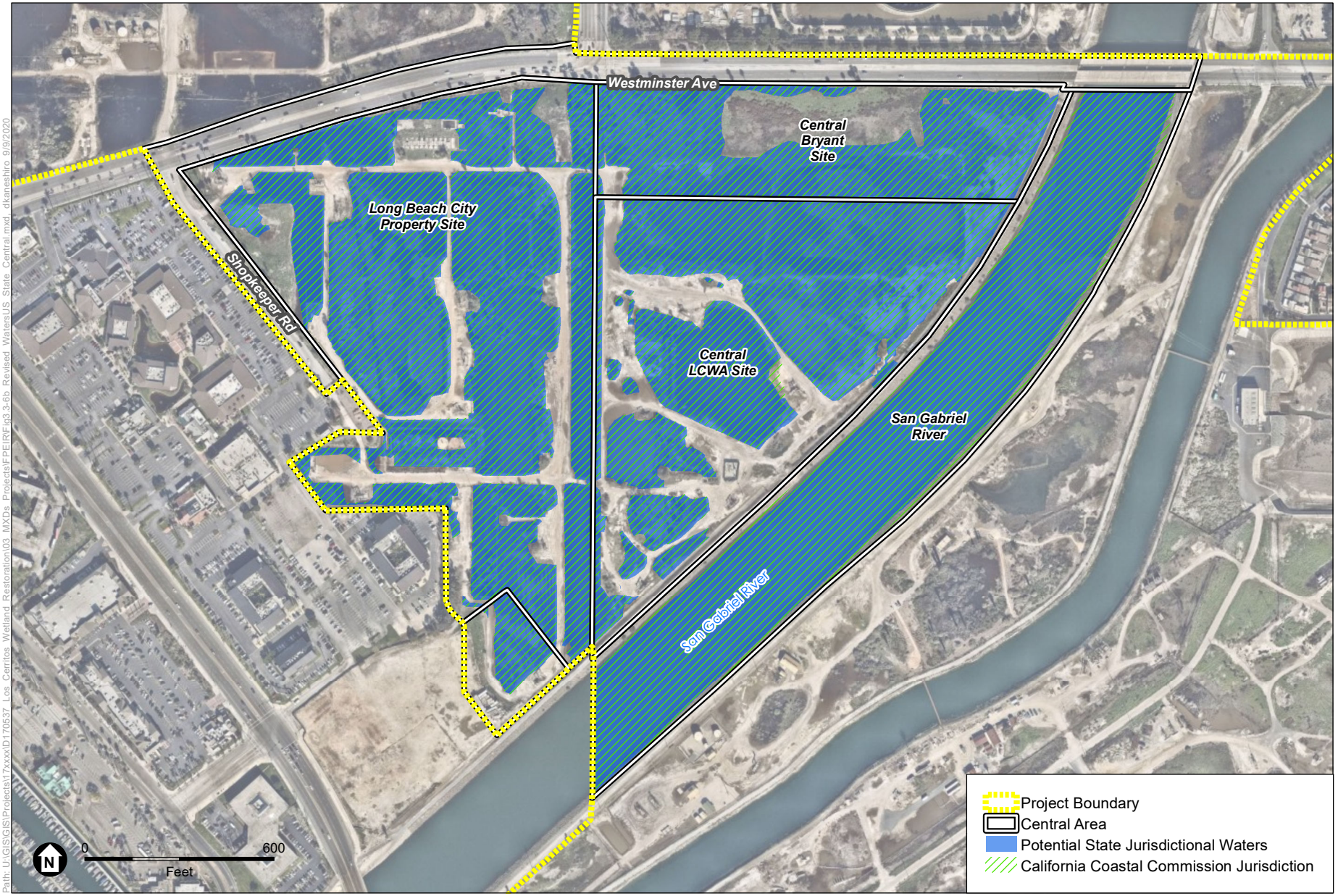
Figure 3.3-6a
Potential Federal Jurisdictional Waters
Central Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants

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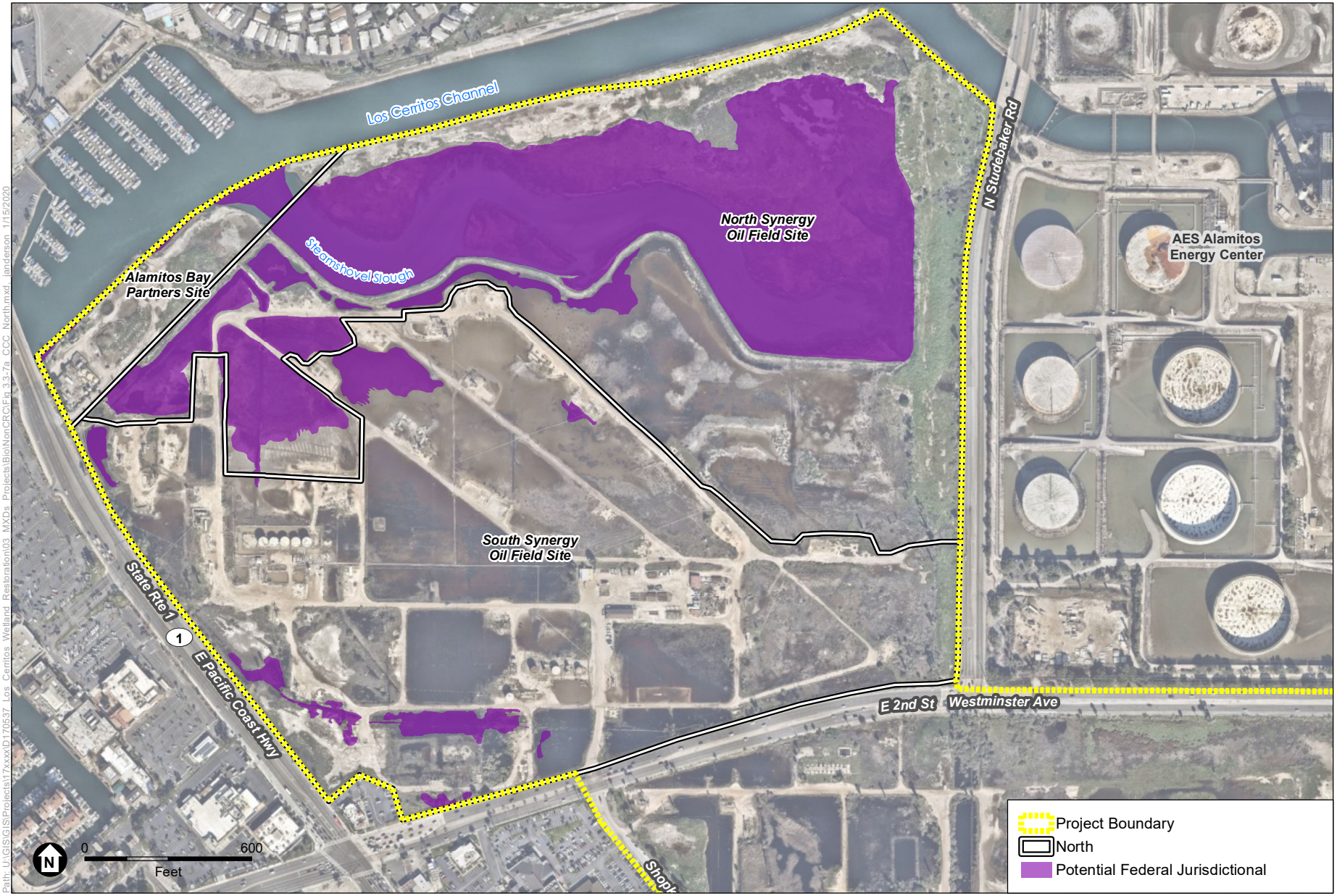
Figure 3.3-6b

Revised Potential State Jurisdictional Waters
Central Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Glenn Lukos Associates

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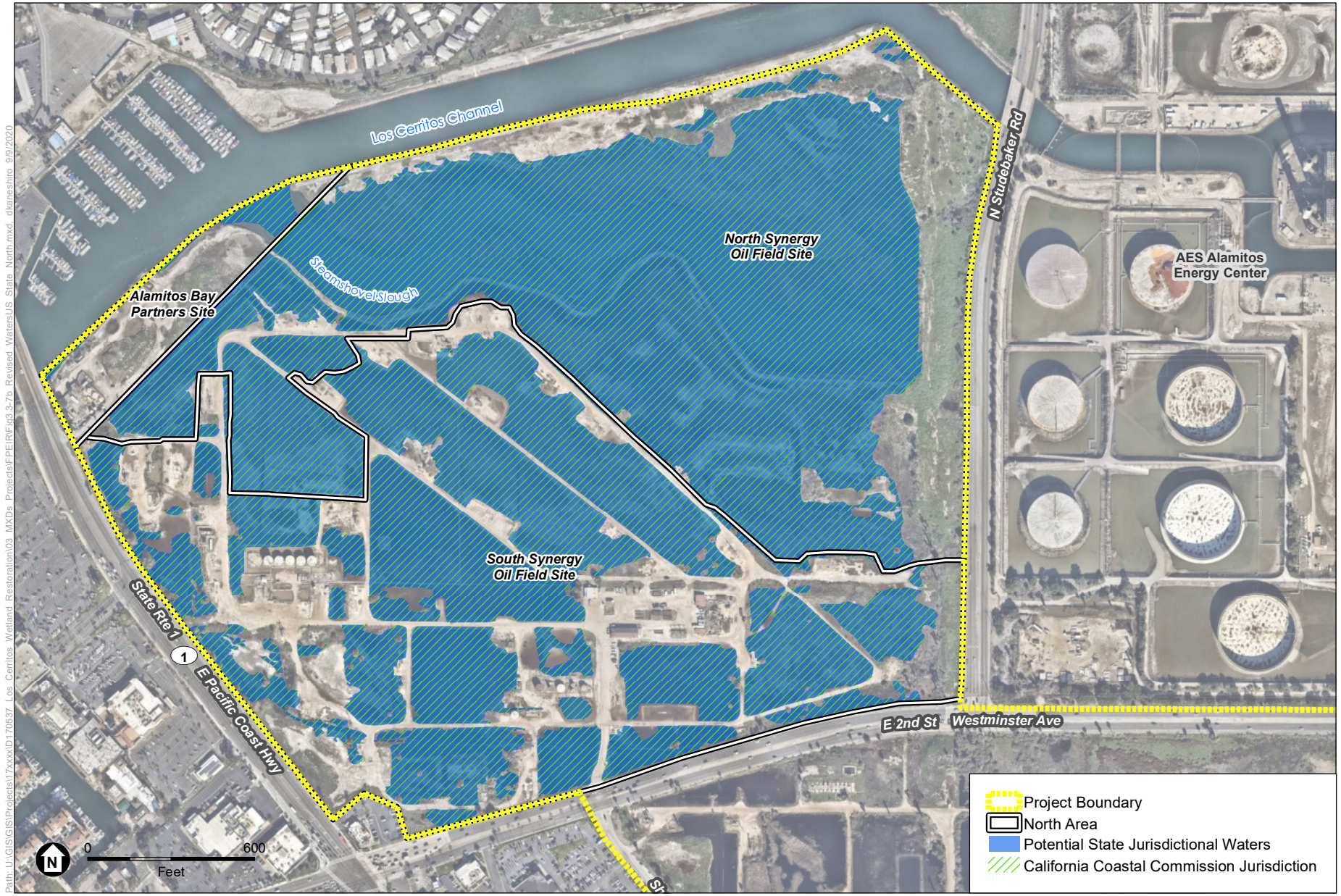
Figure 3.3-7a
Potential Federal Jurisdictional Waters
North Area

ESA



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Glenn Lukos Associates

Los Cerritos Wetlands Restoration Plan Draft Program EIR

Figure 3.3-7b

Revised Potential State Jurisdictional Waters
North Area

ESA

USACE Section 10 Waters

The program area contains 63 acres that are potentially subject to USACE jurisdiction pursuant to Rivers and Harbors Act Section 10. The limits of potential Section 10 Waters are determined solely through the use of elevation data. Specifically, all areas falling below the elevation for mean high water (MHW), which is recorded at 2.12 feet National Geodetic Vertical Datum (NGVD) at this site, meet the USACE definition for "Navigable Waters" pursuant to Rivers and Harbors Act Section 10. The Los Alamitos Retarding Basin site, Haynes Cooling Channel, San Gabriel River and Steamshovel Slough comprise the majority of areas identified as Section 10 Waters based on elevation alone.

Potential State Jurisdictional Waters

Areas potentially subject to CDFW ~~and CCC~~ jurisdiction associated with the program area are limited to tidal channels and associated herbaceous riparian/wetland habitat within the South, Isthmus, Central and North Areas. Potential state jurisdictional waters within the program area includes 234 acres (Figures 3.3-4a through 3.3-7b). It should be noted that approximately 57 acres were not assessed due to inaccessibility but may contain potentially state jurisdictional waters based on review of aerial imagery (Google Earth Pro, 2019). These areas occur in the South Area, predominantly within the Hellman Retained site, some of which is disturbed, as well as the Los Alamitos Retarding Basin site. These unassessed areas are depicted in Figure 3.3-4b. ~~Also, for this PEIR, mud flats are included in areas identified as tidal waters and are considered wetlands under the CCA definition.~~

Potential CCC Jurisdictional Waters

Areas potentially subject to CCC jurisdiction include areas that are potentially federally and/or state jurisdictional, as well as areas that have a single criterion/parameter (i.e., wetland vegetation or hydric soils or wetland hydrology). Potential CCC jurisdictional waters within the program area includes 237 acres (Figures 3.3-4b, 3.3-5b, 3.3-6b and 3.3-7b). Also, for this PEIR, mud flats are included in areas identified as tidal waters and are considered wetlands under the CCA definition.

3.3.3 Regulatory Framework

3.3.3.1 Federal

Endangered Species Act (USC Title 16, Sections 1531 through 1543)

The purpose of FESA and subsequent amendments is to protect and recover imperiled species and the ecosystems upon which they depend. FESA is administered by the USFWS and the Commerce Department's NMFS. USFWS has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon. Under FESA, species may be listed as either endangered or threatened. "Endangered" means a species is in danger of extinction throughout all or a significant portion of its range. "Threatened" means a species is likely to become endangered within the foreseeable future. Under provisions of FESA Section 9(a)(1)(B), it is unlawful to

"take" any listed species. "Take" is defined in FESA Section 3(18): "… harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct."

FESA Section 7 stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS/NMFS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 United States Code (USC) 1536(a)(2).

FESA Section 10 provides the basis for non-federal entities to obtain take authorization. For those actions for which no federal nexus exists, non-federal entities that wish to conduct otherwise lawful activities that may incidentally result in the take of a listed species must first obtain a Section 10 permit from USFWS/NMFS. The non-federal entity is required to develop a Habitat Conservation Plan (HCP) as part of the permit application process. Upon development of an HCP, the USFWS/NMFS can issue incidental take permits for listed species where the HCP specifies, at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.

In addition to the prohibitions on the take of listed species, USFWS/NMFS are also required to designate areas of "Critical Habitat" for species listed under FESA. FESA defines critical habitat as "the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and specific areas outside the geographical area occupied by the species at the time it is listed that are determined by the Secretary to be essential for the conservation of the species."

Marine Mammal Protection Act (16 USC 31)

The MMPA prohibits, with certain exceptions, the "take" of marine mammals in United States waters and by United States citizens on the high seas, and the importation of marine mammals and marine mammal products into the United States.

Jurisdiction for MMPA is shared by USFWS and the NMFS. The USFWS's Branch of Permits is responsible for issuing take permits when exceptions are made to MMPA.

Migratory Bird Treaty Act (16 USC Sections 703 through 711)

The Migratory Bird Treaty Act (MBTA) is the domestic law that affirms, or implements, a commitment by the United States to four international conventions (with Canada, Mexico, Japan, and Russia) for the protection of a shared migratory bird resource. The MBTA makes it unlawful at any time, by any means, or in any manner to pursue, hunt, take, capture, or kill migratory birds. The law also applies to the removal of nests occupied by migratory birds during the breeding season. The MBTA makes it unlawful to take, pursue, molest, or disturb these species, their nests, or their eggs anywhere in the United States.

Fish and Wildlife Coordination Act (16 USC Sections 661–666c)

The Fish and Wildlife Coordination Act (FWCA) authorizes the Secretaries of Agriculture and Commerce to provide assistance to and cooperate with federal and state agencies to protect, rear, stock, and increase the supply of game and fur-bearing animals, as well as to study the effects of domestic sewage, trade wastes, and other polluting substances on wildlife. The amendments enacted in 1946 require consultation with USFWS and the fish and wildlife agencies of states where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted … or otherwise controlled or modified" by any agency under a federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources." The 1958 amendments expanded the instances in which diversions or modifications to water bodies would require consultation with USFWS. These amendments permitted lands valuable to the Migratory Bird Management Program to be made available to the state agency exercising control over wildlife resources.

Magnuson-Stevens Fishery Conservation and Management Act (16 USC Sections 1801 et seq.)

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) is the primary law governing marine fisheries management in United States federal waters. Magnuson-Stevens Act Section 305(b), as amended by the Sustainable Fisheries Act of 1996 (Public Law 104-297), requires federal agencies to consult with NMFS on activities that may adversely affect EFH for species that are managed under federal fishery management plans in United States waters. The statutory definition of EFH includes those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity, which encompasses all physical, chemical, and biological habitat features necessary to support the entire life cycle of the species in question.

Federal Clean Water Act (33 USC 1251 through 1376) Sections 401 and 404

The CWA provides guidance for the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Section 401 requires the Applicant to obtain a federal license or permit that allows activities resulting in a discharge to waters of the United States to obtain state certification, thereby ensuring that the discharge will comply with provisions of the CWA. Section 404 establishes a permit program administered by the USACE that regulates the discharge of dredged or fill material into waters of the United States, including wetlands.

Federal Clean Water Rule

In 2015, the USACE and the United States Environmental Protection Agency (USEPA) issued the Clean Water Rule detailing the process for determining CWA jurisdiction over waters of the United States (WOTUS) (USACE 2015). The rule is currently in effect in California and 21 other states. The 2015 Clean Water Rule includes a detailed process for determining which areas may be subject to jurisdiction under the Clean Water Act, and broadly classifies features into three categories: those that are jurisdictional by rule (Category A below), those that excluded by rule (Category C below) and those features that require a "significant nexus test" (Category B below).

The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in Category B below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark [OHWM]), if a hydrologic connection to a Traditionally Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and USEPA will apply the significant nexus standard to assess the flow characteristics and functions of a potential WOTUS to determine if it significantly affects the chemical, physical, and biological integrity of the downstream TNW.

Wetlands (including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas) are also considered WOTUS and are defined by USACE as "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 for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE (Environmental Laboratory 1987).

2015 Clean Water Rule Key Points Summary

(A) The USACE and USEPA will assert jurisdiction over the following waters (jurisdictional by rule):

- TNWs.
- Interstate waters and wetlands.
- Territorial seas.
- Impoundments of waters (reservoirs, etc.).
- Tributaries with the following attributes:
  - Contributes flow to a TNW.
  - Contain bed, banks, and ordinary high water mark.
  - Can be natural, man-altered, or man-made.
  - Can have constructed breaks (culverts, pipes, etc.) or natural breaks.
- Waters "adjacent" to TNW and their tributaries, including:
  - Waters that are bordering, contiguous, or neighboring a TNW, interstate water, territorial sea, impoundment, or tributary. Includes waters separated from other ''waters of the United States'' by constructed dikes or barriers, natural river berms, beach dunes, or similar.
  - Waters within 100 feet of the OHWM of a TNW, interstate water, territorial sea, impoundment, or tributary.
  - Waters within the 100-year floodplain and within 1,500 feet of a TNW, interstate water, territorial sea, impoundment, or tributary.
  - Waters within 1,500 feet of the high tide line or OHWM of a TNW or territorial sea.

(B) The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW unless excluded by rule (significant nexus test):

- Vernal pools that have a significant nexus to a TNW or territorial sea.
- Waters within the 100-year floodplain of a TNW, interstate water or territorial sea.
- Waters within 4,000 feet of the high tide line or OHWM of a TNW, interstate water, territorial sea, impoundment or tributary.

(C) The USACE and USEPA will not assert jurisdiction over the following features (excluded by rule):

- Waste treatment facilities including basins and percolation ponds.
- Prior converted cropland.
- The following types of ditches:
  - Ephemeral ditches that are not a relocated tributary or excavated in a tributary.
  - Intermittent ditches that are not a relocated tributary, excavated in a tributary, or drain wetlands.
  - Ditches that do not flow, either directly or through another water, into a TNW, interstate waters, territorial sea.
- Artificially irrigated areas that would revert to upland.
- Artificial, constructed lakes and ponds created in dry land such as stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, cooling ponds
- Swimming pools or reflecting pools in dry land.
- Small ornamental waters created in dry land.
- Water-filled depressions created in dry land from mining or construction activities including pits for fill, sand, or gravel.
- Erosional features including gullies and rills that are not tributaries, non-wetland swales and constructed grass waterways.
- Puddles.
- Groundwater.
- Storm water control features created in dry land.
- Wastewater recycling structures created in dry land, including detention and retention basins, groundwater recharge basins, percolation ponds, and water distributary structures.
- USACE and the USEPA have issued a set of guidance documents detailing the process for determining Clean Water Act (CWA) jurisdiction over waters of the United States following the 2008 Rapanos decision. The USEPA and USACE issued a summary memorandum of the guidance for implementing the Supreme Court's decision in Rapanos that addresses the jurisdiction over waters of the United States under the CWA. The complete set of guidance documents, summarized as key points below, were used to collect relevant data for evaluation by the USEPA and the USACE to determine CWA jurisdiction over the proposed program and to complete the "significant nexus test" as detailed in the guidelines.

- Section 401 of the CWA gives the state authority to grant, deny, or waive certification of proposed federally licensed or permitted activities resulting in discharge to waters of the United States. The State Water Resources Control Board (State Water Board) directly regulates multi-regional projects and supports the Section 401 certification and wetlands program statewide. The Regional Water Quality Control Board (RWQCB) regulates activities pursuant to Section 401(a)(1) of the federal CWA, which specifies that certification from the state is required for any applicant requesting a federal license or permit to conduct any activity including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters. The certification shall originate from the state or appropriate interstate water pollution control agency in/where the discharge originates or will originate. Any such discharge will comply with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the CWA.
- The significant nexus test includes consideration of hydrologic and ecologic factors. For circumstances such as those described in point B below, the significant nexus test would take into account physical indicators of flow (evidence of an ordinary high water mark [OHWM]), if a hydrologic connection to a Traditionally Navigable Water (TNW) exists, and if the aquatic functions of the water body have a significant effect (more than speculative or insubstantial) on the chemical, physical, and biological integrity of a TNW. The USACE and USEPA will apply the significant nexus standard to assess the flow characteristics and functions of the tributary drainage to determine if it significantly affects the chemical, physical, and biological integrity of the downstream TNW.
- Wetlands (including swamps, bogs, seasonal wetlands, seeps, marshes, and similar areas) are also considered waters of the United States and are defined by USACE as "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 for life in saturated soil conditions" (33 CFR 328.3[b]; 40 CFR 230.3[t]). Indicators of three wetland parameters (i.e., hydric soils, hydrophytic vegetation, and wetlands hydrology), as determined by field investigation, must be present for a site to be classified as a wetland by USACE (Environmental Laboratory 1987).

Rapanos Guidance Key Points Summary

(A) The USACE and USEPA will assert jurisdiction over the following waters:

- TNWs
- Wetlands adjacent to TNWs
- Non-navigable tributaries of TNWs that are relatively permanent (flows three months or longer)
  - Wetlands that abut such tributaries

(B) The USACE and USEPA will decide jurisdiction over the following waters based on whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary

(C) The USACE and USEPA will not assert jurisdiction over the following waters:

- Swales or erosional features (gullies, small washes characterized by low volume, infrequent, or short-duration flow)
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water

Rivers and Harbor Act of 1899 Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires that regulated activities conducted below the ordinary high water (OHW) elevation of navigable waters of the United States be approved/permitted by the USACE. Regulated activities include placement and removal of structures, work involving dredging, disposal of dredged material, filling, excavation, or any other disturbance of soils/sediments or modification of a navigable waterway. Navigable waters of the United States are those that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past or may be susceptible to use to transport interstate or foreign commerce. Navigable waters of the United States are not necessarily the same as state navigable waterways. Tributaries and backwater areas associated with navigable waters of the United States, and located below the OHW elevation of the adjacent navigable waterway, are also regulated under Section 10.

3.3.3.2 State

California Endangered Species Act (California Fish and Game Code Sections 2050 et seq.)

CESA establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. For projects that would affect a listed species under both the CESA and the FESA, compliance with the FESA would satisfy the CESA if CDFW determines that the federal incidental take authorization is "consistent" with the CESA under California Fish and Game Code Section 2080.1. For projects that would result in take of a species listed under the CESA only, the Applicant would have to apply for a take permit under Section 2081(b).

California Fully Protected Species

California fully protected species are described in California Fish and Game Code Sections 3511, 4700, 5050, and 5515. These statutes prohibit take or possession of fully protected species. The CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by those species.

California State Fish and Game Code Sections 2080 and 2081

California Fish and Game Code Section 2080 states that "No person shall import into this state [California], export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the Commission [State Fish and Game Commission] determines to be an endangered species or threatened species, or attempt any of those acts, except as otherwise provided in this chapter, or the Native Plant Protection Act, or the California Desert

Native Plants Act.". Pursuant to Sections 2080.1 or 2081 of the code, CDFW may authorize individuals or public agencies to import, export, take, or possess state-listed endangered, threatened, or candidate species. These otherwise prohibited acts may be authorized through permits or Memoranda of Understanding if the take is incidental to an otherwise lawful activity, impacts of the authorized take are minimized and fully mitigated, the permit is consistent with any regulations adopted pursuant to any recovery plan for the species, and the project operator ensures adequate funding to implement the measures required by CDFW, which makes this determination based on available scientific information and considers the ability of the species to survive and reproduce.

California State Fish and Game Code Sections 3503, 3503.5, 3513, and 3800

California Fish and Game Code Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. California Fish and Game Code Section 3800 affords protection to all nongame birds, which are all birds occurring naturally in California that are not resident game birds, migratory game birds, or fully protected birds. California Fish and Game Code Section 3513 upholds the MBTA by prohibiting any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA.

California State Fish and Game Code Section 1602

Under this section of the California Fish and Game Code, a project proponent is required to notify CDFW prior to any project that would divert, obstruct, or change the natural flow, bed, channel, or bank of any river, stream, or lake.

Clean Water Act Section 401

Under CWA Section 401, the local RWQCB must certify that actions receiving authorization under CWA Section 404 also meet state water quality standards. The RWQCB requires projects to avoid impacts to wetlands if feasible and requires that projects do not result in a net loss of wetland acreage or a net loss of wetland function and values. Compensatory mitigation for impacts to wetlands and/or waters of the state is required.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (California Water Code Sections 13000–16104) (Porter-Cologne Act) provides the basis for water quality regulation within California and defines water quality objectives as the limits or levels of water constituents that are established for reasonable protection of beneficial uses. Porter-Cologne is administered by the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (RWQCBs), collectively referred to as the Water Boards. The State Water Board sets statewide water quality standards, issues statewide general permits, conducts statewide surface and groundwater monitoring and assessment, administers water rights, regulates drinking water supplies, and issues orders for cleaning up contaminated sites.

The nine semi-autonomous Regional Water Boards are responsible for setting water quality standards and objectives, issuing waste discharge requirements, determining compliance with those requirements, and taking appropriate enforcement actions. Each Water Quality Control Region is regulated through a Water Quality Control Plan, or "Basin Plan," which is updated every three years. The Basin Plans contain the regulations adopted by the Regional Water Boards to control the discharge of waste and other controllable factors affecting the quality or quantity of waters of the state. The Los Cerritos Wetlands Restoration Plan area lies on the boundary of two water quality control regions: Los Angeles and Santa Ana. This boundary is defined by the City and County line.

The Porter-Cologne Act requires the Los Angeles Regional Water Quality Control Board (LARWQCB) to establish water quality objectives, while acknowledging that water quality may be changed to some degree without unreasonably affecting beneficial uses. Beneficial uses, together with the corresponding water quality objectives, are defined as standards, per federal regulations. Therefore, the regional plans form the regulatory standards for meeting state and federal requirements for water quality control. Changes in water quality are only allowed if the change is consistent with the maximum beneficial use designated by the state, does not unreasonably affect the present or anticipated beneficial uses, and does not result in water quality less than that prescribed in the water quality control plans.

California Coastal Act

The state legislature enacted the CCA (PRC Sections 30000 et seq.) to provide for the conservation and planned development of the state's coastline. The CCA defines the "coastal zone" as the area of the state which extends 3 miles seaward and generally about 1,000 yards inland; however, the inland extent of the coastal zone can extend in certain circumstances to a maximum of 5 miles inland from mean high tide line. In developed urban areas, the coastal zone extends substantially less than 1,000 yards inland.

The CCC approves coastal development permits (CDPs) for areas within its original and retained jurisdiction, such as waters of the state and tidelands, energy projects, and federal (federally approved, conducted, or funded) projects consistent with CCA policies. Local jurisdictions may obtain permitting authority under the CCA once a local coastal program has been certified by the CCC.

Applicable CCA policies regarding biological resources include:

> **Section 30230.** Marine resources shall be maintained, enhanced, and, where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.
>
> **Section 30231.** The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges

and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

Section 30233. (a) The diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be permitted in accordance with other applicable provisions of this division, where there is no feasible less environmentally damaging alternative, and where feasible mitigation measures have been provided to minimize adverse environmental effects, and shall be limited to the following:

(1) New or expanded port, energy, and coastal-dependent industrial facilities, including ~~c ommercial~~commercial fishing facilities.

(2) Maintaining existing, or restoring previously dredged, depths in existing navigational channels, turning basins, vessel berthing and mooring areas, and boat launching ramps.

(3) In open coastal waters, other than wetlands, including streams, estuaries, and lakes, new or expanded boating facilities and the placement of structural pilings for public recreational piers that provide public access and recreational opportunities.

(4) Incidental public service purposes, including, but not limited to, burying cables and pipes or inspection of piers and maintenance of existing intake and outfall lines.

(5) Mineral extraction, including sand for restoring beaches, except in environmentally sensitive areas.

(6) Restoration purposes.

(7) Nature study, aquaculture, or similar resource-dependent activities.

(b) Dredging and spoils disposal shall be planned and carried out to avoid significant disruption to marine and wildlife habitats and water circulation. Dredge spoils suitable for beach replenishment should be transported for these purposes to appropriate beaches or into suitable longshore current systems.

(c) In addition to the other provisions of this section, diking, filling, or dredging in existing estuaries and wetlands shall maintain or enhance the functional capacity of the wetland or estuary. Any alteration of coastal wetlands identified by the Department of Fish and Game, including, but not limited to, the 19 coastal wetlands identified in its report entitled, "Acquisition Priorities for the Coastal Wetlands of California", shall be limited to very minor incidental public facilities, restorative measures, nature study, commercial fishing facilities in Bodega Bay, and development in already developed parts of south San Diego Bay, if otherwise in accordance with this division.

For the purposes of this section, "commercial fishing facilities in Bodega Bay" means that not less than 80 percent of all boating facilities proposed to be developed or improved, where the improvement would create additional berths in Bodega Bay, shall be designed and used for commercial fishing activities.

(d) Erosion control and flood control facilities constructed on watercourses can impede the movement of sediment and nutrients that would otherwise be carried by storm runoff into coastal waters. To facilitate the continued delivery of these sediments to the littoral zone, whenever feasible, the material removed from these facilities may be placed at appropriate points on the shoreline in accordance with other applicable provisions of this division, where feasible mitigation measures have been provided to minimize adverse environmental effects. Aspects that shall be considered before

issuing a coastal development permit for these purposes are the method of placement, time of year of placement, and sensitivity of the placement area.

Section 30240.

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

3.3.3.3 Local

City of Seal Beach Municipal Code (Section 9.40)

The City of Seal Beach Public Works Department is responsible for administering Seal Municipal Code (Tree Maintenance Policy), which is to preserve and protect the community's urban forest and to promote the health and safety of City trees, from the time they are planted through maturity.

The City's Tree Maintenance Policy stipulates guidelines for planting, maintenance and removal of street trees[4] located in the public rights-of-way. A permit must be obtained from the Director of Public Works prior to removal of trees from City property.

City of Seal Beach General Plan

Hellman Ranch Specific Plan

Project goals have been established for the development of the Hellman Ranch Specific Plan that essential to achieving balance and sustainable development. These goals that are applicable to the project include:

- Maintain significant acreage for restoration/creation of wetlands and plan for long-term retention of viable wildlife habitat and biodiversity on the site.
- Create/restore a wetlands and environmental ecosystem that provides a meaningful contribution to the regional system of coastal wetlands and open space along the Pacific Flyway.

Open Space/Recreation/Conservation Element

A 100-acre portion of the Hellman Ranch Specific Plan area has been deed restricted for 25 years for sale at fair market value to a public agency for the purposes of wetlands restoration, open space, and environmental education purposes. The adjacent oil production property (approximately 50 acres) has been similarly restricted, although the 25-year deed-restricted time period does not commence until cessation of the oil production activities. It is the intent and goal of the City to address future uses for these areas and cooperate with the property owner, state, local, and private agencies, as well as the community, to provide the means to accomplish this goal.

[4] Street trees are those included in the City of Long Beach's Approved Street Tree List 2012 (City of Long Beach 2017).

City of Long Beach Municipal Code (Section 14.28)

The City of Long Beach Public Works Department is responsible for administering Long Beach Municipal Code (Tree Maintenance Policy), which is to preserve and protect the community's urban forest and to promote the health and safety of City of Long Beach trees, from the time they are planted through maturity.

The City of Long Beach's Tree Maintenance Policy stipulates guidelines for planting, maintenance and removal of street trees[5] located in the public rights-of-way. A permit must be obtained from the Director of Public Works prior to removal of trees from City of Long Beach property. The City also requires that the trees' condition be determined by a City-employed certified arborist prior to removal.

City of Long Beach General Plan

Conservation Element

Vegetation Management Goals

- To provide protective controls for lands supporting distinctive native vegetation and wildlife species that can be used for ecological, scientific and educational purposes.
- To locate, define, and protect other beneficial natural habitats in and about the City.

Wildlife Management Goals

- To promote measures and plans which protect and preserve distinctive types of wildlife including mammals, birds, marine organisms and especially endangered species.

Southeast Area Development and Improvement Plan

The Wetlands

1. The wetlands and associated habitats, and all fresh, brackish and tidal water supply and control systems, shall be constructed at the expense of the developers of Areas 11a, 25 and 26, unless otherwise provided for by agreements between landowners and the managing agency. The developer(s) of Areas 11a and 25 shall be responsible for wetlands development of Areas 23 and 33. The developer(s) of Area 26 shall be responsible for wetlands development of Area 27.

7. Owing to the need to make connections with the existing tidal marsh, the major wetlands restoration project between Los Cerritos Channel and Westminster Avenue shall be accomplished at one time. Restoration of wetlands north of the Los Cerritos Channel and south of the San Gabriel River need not be accomplished concurrently with the major restoration project, or with each other. Prior to the issuance of permits for residential, commercial or industrial development, each applicant shall develop a detailed phasing plan that assures that restoration of wetlands will be completed prior to or concurrently with the completion of urban development on related parcels as specified above. Said detailed phasing plans shall be submitted for approval to the agency responsible for granting the coastal permit.

8. The standard of wetlands restoration is that it shall be completed prior to or concurrently with upland development on related areas. This standard may be satisfied by using one of the following options: (a) Percentage Option: whenever part of the development acreage is built

[5] Street trees are those included in the City of Long Beach's Approved Street Tree List 2012 (City of Long Beach 2017).

upon, an equal percentage of the future wetland acreage will be developed as wetlands; and (b) Acre-for-Acre Option: for every acre of wetland identified for fill and/or consolidation under the Local Coastal Plan that will be covered by the development, the developer shall improve 1 acre of wetland.

9. Exceptions to this standard may arise in Areas 25, 26, and 27 where continuing oil operations and/or leasing problems may make it impossible to fulfill part of a permanent wetlands obligation in connection with upland developments. In such instances (and only in such instances), the following method of fulfilling the wetland obligation may be utilized.

    a. The developer must first develop wetlands on all areas designated for wetlands, which are not encumbered, by active oil operations and/or leases.

    b. If the full wetlands obligation is not satisfied thereby, the remainder of his obligation may be fulfilled by construction of interim wetland areas as a temporary wetlands restoration measure. If such an interim restoration alternative is needed, an interim wetlands restoration program may be developed for up to 8 acres of the total wetlands obligation for development of Parcel 26, and up to 8 acres for development of Parcel 25, where continuing oil operations and/or leasing problems may interfere with the total restoration program as set forth in the Wetlands Enhancement Plan. Such a program shall be subject to review and approval by the Executive Director of the California Coastal Commission in consultation with the Department of Fish and Game.

        This alternate interim wetlands restoration program, limited for up to 16 acres total, shall at minimum, include provisions that:

        (1) Identify location and size of affected developable areas and proposed interim wetland areas, and provide for the construction of interim wetlands equal in productivity and size to areas filled. They shall be maintained for wildlife by the developer until such time as the major restoration program can be accommodated on encumbered lands.

        (2) Provide for a monitoring system undertaken in conjunction with Department of Fish and Game, assuring biological values of the interim wetlands.

        (3) Where legally possible, place deed restrictions over the interim wetlands prohibiting development in such areas until the implementation of the primary restoration program.

        (4) Provide for the construction of the interim wetlands prior to or concurrently with the development of wetland areas of Areas 25 and 26 that cannot be directly mitigated by the acre-for-acre restoration option set forth in the land use plan.

        (5) Ensure that interim wetlands are to be viewed as temporary and shall not in any way be construed to increase the total wetland obligation within the study area. These areas may be converted to upland areas for development purposes upon completion of the primary restoration project.

        (6) When sufficient on-site acreage is not available, use of off-site acreage within the San Gabriel River Wetlands system may be permitted for interim wetlands, with such location of off-site interim wetlands being subject to the approval of the Executive Director of the California Coastal Commission in consultation with the Department of Fish and Game.

10. If an owner/developer elects to utilize the temporary wetlands option to obtain permits and proceed with development, it is necessary to provide a mechanism, which will assure that monies for future construction of permanent wetlands to replace the temporary wetlands will be available when such permanent construction is imminent. This is particularly important in view of the fact that many years may separate the construction of the temporary and

permanent wetlands, and that during that span of time, title may change several times and the obligation for permanent wetlands construction may become clouded or lost. Therefore, when an owner/developer utilizes the temporary wetlands option (in the limited circumstances described in #4 above), he/she must deposit monies in a Wetlands Restoration Fund, under the terms described below, (or provide other means to guarantee development of the permanent wetlands):

a. The construction assurance funds shall be deposited at the time the developer applies for construction permits for a temporary wetlands program;

b. The amount of the funds to be deposited shall be derived from the cost estimate referred to in Item 5c, below;

c. The first developer shall be responsible for the preparation of construction drawings, specifications, and cost estimates for the total wetland plan in his area. Such cost estimates shall include a contingency factor, which is normal and customary in projects of this magnitude and complexity. These shall be approved by the engineer of the local jurisdiction in consultation with the Department of Fish and Game;

d. The Wetlands Restoration Fund shall be established by the City of Long Beach when the first assurance payment is imminent. The fund shall be established in an interest-bearing account. Interest shall accrue to the account. As much as possible, the account shall be managed to earn sufficient annual interest to match the annual increases in the Consumer Price Index for Southern California. Monies shall be withdrawn from the fund to pay for the construction of permanent wetlands deferred through use of the temporary option. Any monies remaining in the fund, including interest, after all wetlands are totally restored, shall be utilized for on-going maintenance of the wetlands. When an agency or non-profit corporation accepts permanent management responsibilities of the wetlands, the Fund may be transferred to that agency or corporation.

e. Wetlands in those areas for which assurance funds were deposited shall be developed at the first available opportunity. When an agency or non-profit corporation accepts permanent management responsibilities of the wetlands, the Fund may be transferred to that agency or corporation.

11. Overall custodial and interpretive management and financial responsibility for maintenance of Los Cerritos Wetlands shall be vested in an appropriate governmental agency or private non-profit corporation upon the initiation of the first wetlands restoration project. Prior to issuance of any permits for any projects related to wetlands construction, nomination of the managing agency shall be made by the City of Long Beach with the concurrence of the state Department of Fish and Game.

The Buffers

1. The wetlands are to be separated from urban developments by "buffers". In the context of this LCP, the buffers are treated as a part of the adjacent urban developments, as they will form a part of the amenities. Construction and maintenance of the buffers, therefore, falls entirely on the developers and their successors in interest. The reader should note that buffers are constructed only north of Westminster Avenue. The restored wetlands south of Westminster Avenue will have no buffers, owing to the fact that they will be separated from other uses by natural barriers.

7. Buffers between subareas 11a and 33 shall be created by developer(s) of 11a prior to or concurrently with development of upland areas. The berm between wetlands and development shall be created as a part of the grading operation of the wetland. If build out is phased over a period longer than two years, then the landscaping and irrigation system for the

buffer can be phased with each phase of landscaping for the development with this exception; that at the beginning of each phase, prior to finish grading for that phase, a row of shrubs shall be planted at the top of the berm to offer protection during construction. Provisions must be made to deny public access to all portions of areas not included in the current building program. Design of the buffers must conform to the standards set forth in the certified Local Coastal Plan for the Los Cerritos Wetlands.

8. If urban development remains the property of landowners and/or developers, they shall be responsible for continuous maintenance of the buffers. This responsibility shall run with the land. If urban development becomes condominiums, the buffers shall become a part of the area held in common, and continuous maintenance shall be the responsibility of the property owner's association(s). The agency in charge of the management of the restored wetlands may provide comments and recommendations to those responsible for maintenance of the buffers if lack of proper maintenance is causing the buffers to fail in their primary mission to prevent visual and physical access to the wetlands habitats. Breeches in the buffer which seriously threaten habitat values in the wetlands, and which have been reported by the wetlands management agency and have not been repaired in a timely fashion by the individual or agency responsible for maintenance, may be repaired by the wetlands management agency. Costs for such repairs shall be collected from the property owner's association.
9. Where property owners' associations are formed, the requirement for continuous buffer maintenance shall be included in their Articles of Incorporation, and monthly dues shall be sufficient for this purpose.
10. The primary mission of the buffer is to prevent physical access into the wetlands and to prevent visual disturbances of wetland wildlife. The buffer, as shown in the Local Coastal Plan, consists of a berm of mounded soil, a fence, and plant material. Plant material will be chosen to be (in descending order of priority):
    a. Of a growth form that supports the primary mission (i.e., of assistance in preventing access and/or screening development from the wetlands);
    b. Compatible with soil, water and climate conditions of the immediate site;
    c. Fast growing;
    d. Compatible with adjacent development;
    e. Low maintenance; and
    f. of wildlife food and/or cover value.

South East Area Specific Plan 2060[6]

5.8 Wetlands Delineations

New projects within the Coastal Habitat, Wetlands, and Recreation designation require the preparation of a biological study to determine in the location and extent of wetlands resources on

[6] The City is in the process of replacing the existing PD-1 (SEADIP) with the proposed South East Area Specific Plan (SEASP) 2060. The proposed SEASP 2060 was adopted by the City Council on September 19, 2017. Note that the time of writing this PEIR, the CCC has yet to certify the proposed SEASP 2060; however, it is anticipated that the SEASP 2060 will be completed and issued in its final form within the lifetime of the proposed program.

a site, if any. When a wetland delineation is required by the City for a new development application or permit, one of two options may be provided by the applicant:

1. A preliminary jurisdictional delineation approved by the U.S. Army Corps of Engineers showing the location and extent of wetlands or sensitive resources, or
16. A letter signed by a qualified biologist declaring that no wetlands or sensitive resources will be impacted by the proposed development.

5.9 Wetland Conservation and Monitoring Fund

The City shall establish a Wetland Conservation and Monitoring Fund and establish fees pursuant to a Property Analysis Record (PAR). Each development or redevelopment shall contribute its fair share based on the size of the development to this fund, which will be created to provide restoration and long-term management to the publicly owned wetlands within the SEASP Plan area.

Mitigation for impacts for water of the state and United States will be provided pursuant to Coastal Commission and regulatory agency permits.

5.10 Wetland Buffers

Buffers are typically required 100 feet from a wetland resources. However, due to site-specific conditions, a smaller buffer may be approved. Any portion of the buffer less than 100 feet shall require contribution to the Wetland Conservation and Monitoring Fund at the current market rate per each quarter of an acre as established by the City. At a minimum, the applicant must incorporate a 25-foot vegetated "habitat separation" area within the buffer which shall be approved by the City. The habitat separation area must be designed to shield the existing wetland from lighting, noise, urban runoff, and human intrusion resulting from the project. Buffers should:

- Minimize the disturbance to a wetland from adjacent development.
- Be designed, where necessary, to help minimize the effect of erosion, sedimentation and pollution arising from urban, industrial, and agricultural activities; however, to the extent possible, erosion sedimentation, and pollution control problems should be dealt with at the source not in the wetland or buffer area.
- Allow for passive recreational uses within the area, only if it can be shown that these uses will not adversely impact the wetland ecosystem or the buffer's function. These uses may include bird watching, walking, jogging, and bike riding, and may include the construction of paths and interpretive signs and displays. All access, trails, or paths should be constructed to minimize impact to plants and animals.

Buffers are intended to serve as a transition from urbanized areas to natural areas. No new residential, commercial, or industrial buildings will be located within 100 feet of a delineated wetland. Public facilities or buildings (utilities, interpretive centers, etc.) and uses in compliance with the CHWR land use designation may be allowed within the 100-foot buffer. Existing roadways are allowed within buffers. In addition, the future alignment of the completion of Shopkeeper Road between 2nd Street and Studebaker Road, as described in Chapter 6, Mobility, Section 6.6.8, shall be designed so that it does not impact any delineated wetland.

Developments with wetland buffers will be required to prepare and record covenants regarding maintenance obligations of buffer areas. The agency in charge of the management of the restored wetlands may provide comments and recommendations to those responsible for maintenance of the buffers if lack of proper maintenance is causing the buffers to fail in their primary mission to prevent visual and physical access to the wetlands habitats. Breaches in the buffer which seriously threaten habitat values in the wetlands, and which have been reported by the wetlands management agency and have not been repaired in a timely fashion by the individual or agency responsible for maintenance, may be repaired by the wetlands management agency. Costs for such repairs shall be collected from the property owner's association.

5.11 Standards Applicable to All Areas Adjacent to Jurisdictional Waters and Wetlands

Development projects in proximity to jurisdictional waters or habitat for special status species and all land within the Coastal Habitat, Wetlands, and Recreation land use shall comply with the following:

- Prior to approval of a trails/access plan within or adjacent to jurisdictional waters, the location, design, and text for urban-open space interface signage shall be developed. The signage shall be located at all pedestrian access points. The signage shall educate users on the responsibilities associated with the open space interface and shall address relevant issues, including the role of natural predators in the wildlands and how to minimize impacts of human and domestic pets on native communities and their inhabitants.
- Prior to approval of any development adjacent to jurisdictional waters or habitat for special status species and all land within the Coastal Habitat, Wetlands, and Recreation land use, the project applicant shall submit a photometric plan demonstrating that the project will be designed and shielded so that the nighttime lighting shall be no greater than 0.10 foot-candles at the edge of the habitat. This would ensure that spill light does not result in exposure of artificial light at levels exceeding the intensity of moonlight (approximately 0.5 foot-candles).
- Prior to the issuance of building permits, the project applicant and/or subsequent builder shall prepare an urban-open space interface brochure to be approved by the Long Beach Development Services Department to educate residents on the responsibilities associated with living near sensitive biological habitat. The brochure shall address relevant issues, including the role of natural predators in the wildlands and how to minimize impacts of human and domestic pets on native communities and their inhabitants. The approved brochure, along with attachments, shall be included as part of the rental/lease agreements and as part of the sales literature for future developments.

7.3.14 Bird-Safe Treatments

In deference to the presence of significant wetlands areas in the SEASP area, new projects should be sensitive to the interface and transition between urban areas and natural areas. Many of these areas provide habitats for birds and therefore special design considerations should be applied to three primary areas: lighting, landscaping, and façade treatments.

The reflectivity and transparency of glass are the primary hazards to birds. Highly reflective surfaces falsely imitate the sky, clouds, or nearby trees or vegetation. Sheets of transparent glass are invisible to birds and become dangerous barriers to migration routes, shelter, and food. Lights

may also disorient and confuse birds by inhibiting their ability to see navigational markers such as the stars and the moon.

In particular, the Los Cerritos Wetlands conservation area attracts a variety of bird species that utilize this unique coastal habitat. The endangered California Least Terns and several populations of Belding's Savannah Sparrows have been documented as present in the study area. The proximity of new development to the Los Cerritos Wetlands warrants bird-safe treatments.

All new buildings, and major renovations of existing buildings, shall be required to provide bird-safe building treatments for the façade, landscaping, and lighting consistent with the standards of this section.

The following standards and guidelines were derived from bird-safe building standards identified by the cities of San Francisco and Oakland, the Audubon Society, and Leadership in Energy and Environmental Design (LEED) documents.

Bird-Safe Façade Treatments

All new buildings and major renovations of existing buildings shall be required to provide bird-safe building façade treatments to reduce the potential for bird strikes.

A. Glass treatment or architectural design visible to birds shall be used to reduce the amount of untreated glass or glazing to less than 10 percent of the building façade above the ground floor. These treatments are also required for the portions of ground floors that face the Los Cerritos Wetlands. Figure 7-10, Bird-Safe Treatments for Transparent Surfaces, depicts a range of surfaces from the greatest to the least threat for strike potential. Treatment options for glass and architectural building design ideas include, but are not limited to:

   - **Film and Art Treatment of Glass.** This option may be used to reflect the community or type of use occupying the building through art. This method allows the windows to be used as art creating an attractive scene for the community that deters bird strikes.
   - **External Screens.** Screens can be used as an inexpensive and effective method of preventing bird strikes. Screening or netting, stretched several inches over windows or entryways to create a visual barrier and prevent birds from hitting the glass.
   - **Architectural Design Features.** The use of architectural features such as overhangs, louvers, and awnings can be used to block the view of glass from birds. They should be combined with window treatments to eliminate reflections.
   - **Fritted and Frosted Glass.** Fritting is a commonly used and inexpensive solution that is most successful when the frits are applied on the outside surface. Ceramic dots—or frits—applied between layers of insulated glass can also be used to reduce transmission of light. Frits can be applied in different colors and patterns and can commonly be seen on commercial buildings.
   - **Angled Glass.** Design buildings with angled glass at 20 to 40 degrees, most appropriate for low-scaled buildings with smaller panes and a limited amount of glass; generally, this technique is not effective for large buildings.
   - **Ultra-Violet Glass.** Use glass that reflects ultra-violet light, this type of light is primarily visible to birds but not to people. Insulated glass is also available with ultra-violet patterns that are designed to deter birds while largely being imperceptible to humans.

- **Window Signage.** Similar to film and art treatments, window signage could be used to deter bird strikes as long as consistent with Chapter 21.44, On-Premises Signs, of the Long Beach Municipal Code.

B. Where applicable, vertical elements within the treatment pattern should be at least one-quarter inch (1/4") wide at a maximum spacing of four inches (4") and horizontal elements should be at least one-eighth-inch (1/8") wide at a maximum spacing of two inches (2").

C. No glazing shall have a "Reflectivity Out" coefficient exceeding 30 percent. The fraction of radiant energy that is reflected from glass or glazed surfaces shall not exceed 30 percent.

D. Building features such as freestanding glass walls, wind barriers, balconies, and greenhouses are also required to comply with these glazing treatments. See Figure 7-10 for acceptable levels of treatment for transparent surfaces.

E. Equivalent treatments recommended by a qualified biologist may be used if approved by the City and/or the Coastal Commission.

F. Building and site designs such as transparent passageways, corners, atria, or courtyards that can trap birds are prohibited.

Bird-Safe Landscaping

Landscaped areas next to buildings, including patios and interior courtyards, shall be designed and sited to avoid or minimize bird-strike hazards caused by reflective building surfaces. Landscaping shall be designed to keep birds away from the building's façade through the following standards:

A. Trees and other vegetation shall be sited so that the plants are not reflected on building surfaces.

B. To obscure reflections, trees and other vegetation planted adjacent to a reflective wall or window shall be planted close to (no further than three feet from) the reflective surface.

C. For exterior courtyard and recessed areas, building edges shall be clearly defined by using opaque materials or non-reflective glass.

D. Walkways constructed of clear glass shall be avoided.

E. Plant material shall comply with Appendix D, Plant Palette.

Lights Out for Birds

A. The City shall encourage building owners and operators to participate in "Lights Out for Birds" programs or similar initiatives by turning off lighting at night, particularly during bird migration periods.

Bird-Safe Building Interiors

A. Light pollution from interior lighting shall be minimized through the utilization of automated on/off systems and motion detectors.

Bird-Safe Lighting Design

Buildings shall be designed to use minimal external lighting (limited to pedestrian safety needs) and to minimize direct upward light, spill light, glare, and artificial night sky glow. Buildings

shall also be designed to minimize light pollution from interior lighting to the maximum feasible extent.

A. Nighttime lighting shall be minimized to levels necessary to provide pedestrian security.

B. Buildings shall be designed to minimize light spillage and maximize light shielding to the maximum feasible extent.

C. Building lighting shall be shielded and directed downward, up-lighting is prohibited. Use of "event" searchlights or spotlights shall be prohibited.

D. Landscape lighting shall be limited to low-intensity and low-wattage lights.

E. Red and blue lights shall be limited to only that necessary for security and safety warning purposes, warm-white lights or filtered LEDs designed to minimize blue emissions shall be used.

F. See Chapter 5, Development Standards, Section 5.11, Standards Applicable to All Areas Adjacent to Jurisdictional Waters and Wetlands, for additional lighting requirements.

Wetland Proximity

In addition to the standards above, buildings located 100 feet from delineated wetlands shall also comply with the following:

A. Limited height.

B. Minimize the number of and, whenever possible, co-locate rooftop antennas and other rooftop structures.

C. Monopole structures or antennas shall not include guy wires.

9.4.2 Regional Plans, Programs, and Agencies

LCWA Wetlands Conceptual Restoration Plan

The restoration plan is a future vision of the wetlands and consists of two reports—Opportunities and Constraints Report and Watershed Impacts Report. Six goals guide implementation of the plan:

- Restore tidal wetland processes and functions to the maximum extent possible.
- Maximize contiguous habitat areas and maximize the buffer between habitat and sources of human disturbance.
- Create a public access and interpretive program that is practical, protective of sensitive habitat and ongoing oil operations, and economically feasible, and that will ensure a memorable visitor experience.
- Incorporate phasing of implementation to accommodate existing and future potential changes in landownership and usage, and as funding becomes available.
- Strive for long-term restoration success. » Integrate experimental actions and research into the project, where appropriate, to inform restoration and management actions for this project.

Although, funding has not been obtained for the restoration, the plan identifies funding opportunities such as mitigation credits as well as possible state and/or federal grants.

3.3.4 Significance Thresholds and Methodology

The following discussion examines the potential impacts to plant and wildlife resources that may occur as a result of implementation of the proposed program.

3.3.4.1 Significance Thresholds

For the purposes of this Program Environmental Impact Report (PEIR) and consistency with Appendix G of the *CEQA Guidelines*, the proposed program would have a significant impact on biological resources if it would:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or United States Fish and Wildlife Service;

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or United States Fish and Wildlife Service;

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

As detailed in the Initial Study (refer to Appendix A of this PEIR), the proposed program would result in no impact to threshold "f". Although not required, evaluation of the proposed program's impact to threshold "f" was conducted in this section.

3.3.4.2 Methodology

Although specific impacts are not described in this PEIR, project-related impacts can be direct or indirect and can occur during construction or operation of future, proposed projects within the program area. This includes impacts associated with ecosystem restoration activities such as grading and revegetation as well as impacts associated with flood risk and stormwater management, public access and visitor facilities development and infrastructure and utility modifications as described in the project description.

Direct impacts are considered to be those that involve the loss, modification, or disturbance of plant communities, which in turn directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or wildlife, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Other impacts, such as loss of foraging habitat, can occur although these areas or habitats are not directly removed by project activity (i.e., indirect impacts). Indirect impacts can also involve the effects of increases in ambient levels of noise or light, competition with exotic plants and animals, and increased human disturbance. Indirect impacts may be associated with the subsequent day-to-day activities associated with some projects, such as increased traffic use, exotic ornamental plantings that provide a local source of seed, which may be both short-term and long-term in their duration. These impacts are commonly referred to as "edge effects" and may result in a slow replacement of native plants by exotics, and changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to the program area.

As stated in Chapter 1, *Introduction*, on March 8, 2019, the Los Cerritos Wetlands Authority sent a Notice of Preparation to responsible, trustee, and federal agencies, as well as to organizations, and individuals potentially interested in the proposed program to identify the relevant environmental issues that should be addressed in the PEIR. Issues related to biological resources were identified.

3.3.5 Program Impacts and Mitigation Measures

Impact BIO-1: The proposed program would result in a significant impact if the proposed program would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or United States Fish and Wildlife Service.

Construction

Special-Status Plants

Suitable habitat is present or individuals have been observed in the proposed program area for 31 special-status plant species, including within the South, Isthmus, Central and North Areas (refer to Table 3.3-4). Many of these species have not been documented in the program area, but they have the potential to occur there. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications may impact these species should they be present. The loss of any of these species, should they be present, would be significant. Implementation of Mitigation Measure BIO-1 would reduce impacts to these species to a less-than-significant level by requiring avoidance and/or re-establishment of special-status plants, and restoration of any impacts to these special-status species, respectively. Implementation of Mitigation Measure BIO-2 would further reduce impacts to these species through the implementation of a Worker Education Awareness Program (WEAP) and monitoring of initial work efforts by a qualified biological monitoring.

Special-Status Invertebrates

Mudflat Tiger Beetle, Wandering Skipper, Sandy Beach Tiger Beetle, Senile Tiger Beetle, Western Beach Tiger Beetle, and Western Tidal-Flat Tiger Beetle

Mudflat tiger beetle and salt marsh tiger beetle have been documented in the North Area. Suitable habitat for these special-status invertebrates occur within program area, including the South, Isthmus, Central, and North Areas. Focused surveys have not been performed; however, it is expected that

these invertebrates may occur within and/or adjacent to the salt marsh habitats throughout the program area including within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities would result in temporary loss of suitable habitat for these species. However, given the phased approach to minimize impacts across the program area, and the amount of suitable mudflat habitat that would be restored, impacts from restoration activities (i.e., grading) would be minimized, and the proposed program would result in a long-term benefit to invertebrate species. The temporary loss of existing mud flat habitat during the restoration process is not expected to cause a special-status invertebrate species to drop below self-sustaining levels, since a substantial amount of mudflat area will be preserved. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including special-status invertebrate species. Therefore, impacts to special-status invertebrates would be less than significant.

Mimic Tryonia

Suitable habitat for mimic tryonia occurs within program area, including the South, Isthmus, Central, and North Areas. Focused surveys have not been performed; however, it is expected that this species may occur within the aquatic habitats throughout the program area including within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities would result in temporary loss of suitable habitat for these species. However, given the phased approach to minimize impacts across the proposed program area, and the amount of suitable aquatic habitat that would be restored, impacts from restoration activities (i.e., grading) would be minimized, and the proposed program would result in a long-term benefit to the species. The temporary loss of existing aquatic habitat during the restoration process is not expected to cause the species to drop below self-sustaining levels, since a substantial amount of aquatic habitat within the program area will be preserved and an abundance of aquatic habitat occurs outside the program area. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including special-status invertebrate species. Therefore, impacts to mimic tryonia would be less than significant.

Monarch Butterfly

The monarch butterfly was not observed in the program area during any general biological surveys and is not known to occur in the program boundary; however, the stands of palm and eucalyptus trees associated with the program areas provide suitable habitat for this species including within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access and infrastructure and utility modifications has the potential for limited impacts on this species; however, given the phased restoration approach and implementation of Mitigation Measures BIO-2 and BIO-8 that requires a WEAP, biological monitoring, preconstruction surveys and relocation, impacts to monarch butterfly would be less than significant. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including monarch butterfly; as such, implementation of the proposed program would have a net benefit on this species.

Non-Special-Status Invertebrates

Wetlands are among the world's most valuable and most threatened habitats, and invertebrates are an extremely important component in these ecosystems. These invertebrates are one of the primary trophic links between lower plants and higher vertebrates (i.e., amphibians, birds and fish). Grading within wetland or mudflat areas could result in mortality of non-special-status invertebrates. As such, Mitigation Measure BIO-9 requires that soils within mudflat areas be salvaged (where feasible) for areas that are proposed for activities such as grading, and reintroduced to restoration areas as part of the revegetation of sensitive natural areas. This will increase invertebrate survival and dispersal into newly land converted areas.

Special-Status Mammals

Pacific Pocket Mouse

The Pacific pocket mouse was not observed in the program area during any general biological surveys and is not known to occur in the program boundary; however, the salt marsh associated with the program areas provides suitable habitat for this species including within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications has the potential for limited impacts on this species; however, given the phased restoration approach and implementation of Mitigation Measures BIO-2 and BIO-8 that requires a WEAP, biological monitoring, preconstruction surveys and relocation, impacts to Pacific pocket mouse would be less than significant. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including Pacific pocket mouse; as such, implementation of the proposed program would have a net benefit on this species.

South Coast Marsh Vole and Southern California Salt Marsh Shrew

The south coast marsh vole and Southern California salt marsh shrew were not observed in the program area during any general biological surveys; however, the salt marsh areas associated with the program area provide suitable habitat for these species including within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications have the potential for limited impacts on these species; however, given the phased restoration approach and implementation of Mitigation Measures BIO-2 and BIO-8 that require implementation of a WEAP, biological monitoring, preconstruction surveys and relocation, impacts to these vole and shrew species would be less than significant. Moreover, the loss of suitable habitat during grading will be limited and is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including south coast marsh vole and Southern California marsh shrew; as such, implementation of the proposed program would have a net benefit on these species.

Western Mastiff Bat and Western Yellow Bat

The western mastiff bat and western yellow bat were not observed in the program area during any general biological surveys; however, all four areas may provide suitable habitat for these species and palm trees may provide roosting habitat including within the South, Isthmus, Central, and

North Areas. Ecosystem restoration activities, development of public access and infrastructure and utility modifications exhibits potential for limited impacts on this species; however, given the phased restoration approach and the extensive area of suitable habitat preserved and restored, potential habitat impacts would not cause this species to drop below self-sustaining levels. Restoration activities would not be expected to result in the direct loss of individuals and the implementation of the proposed program would improve the condition and extent of these species' preferred habitat following completion of the proposed program. Implementation of Mitigation Measures BIO-2, BIO-7 and BIO-8 would ensure that these mammals would be unharmed if encountered and result in a less-than-significant impact.

Special-Status Aquatic and Reptile Species

Pacific Green Sea Turtle

Pacific green sea turtle has either been observed in or potential habitat has been identified within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel). Pacific green sea turtle has not been observed within the Isthmus Area and suitable habitat does not occur within the Isthmus Area. There is low potential for ecosystem restoration activities and flood risk and stormwater management activities to impact this species if impacts within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel) occur. Impacts to Pacific green sea turtle are not anticipated to occur within the Isthmus Area. In accordance with Mitigation Measures BIO-2 and BIO-8, potential impacts on Pacific green sea turtle would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys and specific avoidance measures.

Steelhead – Southern California DPS

Steelhead has not been observed within the South, Isthmus, Central or North Areas; however, focused surveys have not been conducted. Suitable habitat for steelhead occurs within the North Area (Steamshovel Slough) and Central Area (San Gabriel River). There is low potential for ecosystem restoration activities and flood risk and stormwater management associated with the proposed program to impact this species within the Central and North Areas. In accordance with Mitigation Measures BIO-2 and BIO-8, potential impacts on steelhead would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys and specific avoidance measures.

Tidewater Goby

Tidewater goby has not been observed within the South, Isthmus, Central or North Areas; however, focused surveys have not been conducted. Suitable habitat for tidewater goby occurs within the North Area (Steamshovel Slough), Central Area (San Gabriel River), Isthmus Area (Zedler Marsh), and South Area (Haynes Cooling Channel). There is low potential for ecosystem restoration activities and flood risk and stormwater management associated with the proposed program to impact this species within the South, Central and North Areas. In accordance with Mitigation Measures BIO-2 and BIO-8, potential impacts on tidewater goby would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys and specific avoidance measures.

Western Pond Turtle

Western pond turtle has not been observed in the program area and is unlikely to occur; however, potentially suitable habitat has been identified within the South, Central, and North Areas. There is low potential for ecosystem restoration activities and flood risk and stormwater management program activities to impact this species if impacts to freshwater marsh occur. In accordance with Mitigation Measures BIO-2 and BIO-8, potential impacts on western pond turtle would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys and specific avoidance measures.

Coast Horned Lizard, Coastal Whiptail, Red Diamond Rattlesnake, and Southern California Legless Lizard

The coast horned lizard, coastal whiptail, and Southern California legless lizard were not observed in the program area during any general biological surveys. The red diamond rattlesnake was observed in the program area, although the individual may have been released into the area. The upland areas within the South, Central, Isthmus, and North Areas provide suitable habitat for these species. Ecosystem restoration activities, development of public access and infrastructure, and utility modifications could have limited impacts on this species; however, given the phased restoration approach and the extensive area of suitable habitat within the program area that would be preserved and restored, the restoration activities associated with the proposed program would not cause this species to drop below self-sustaining levels (if present). Moreover, direct impacts during grading activities would be less than significant through the implementation of Mitigation Measures BIO-2 and BIO-8 that requires implementation of a WEAP, biological monitoring, focused habitat assessment, pre-construction surveys, capture and relocation of special-status wildlife, including these special-status reptile species, and analysis and mitigation of impacts in a project-level CEQA document. Also, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for these reptile species; therefore, implementation of the proposed program would have a net benefit on these species.

Special-Status Avian Species

American Peregrine Falcon

American peregrine falcon has been observed within the program area. The South, Isthmus, Central, and North Areas contain suitable foraging habitat for the peregrine falcon, which is expected to forage at least occasionally within the proposed program area, particularly during the wintering period when populations of waterfowl and shorebirds are highest. No suitable breeding habitat for this species has been documented within the program area. Ecosystem restoration activities, flood risk and stormwater management, development of public access and infrastructure, and utility modifications may temporarily prevent American peregrine falcons from foraging within the program area; however, the proposed program would improve the overall habitat conditions, which includes foraging habitat for American peregrine falcon. Therefore, impacts to peregrine falcon and its foraging habitat would be less than significant following the implementation of the proposed program.

Belding's Savannah Sparrow

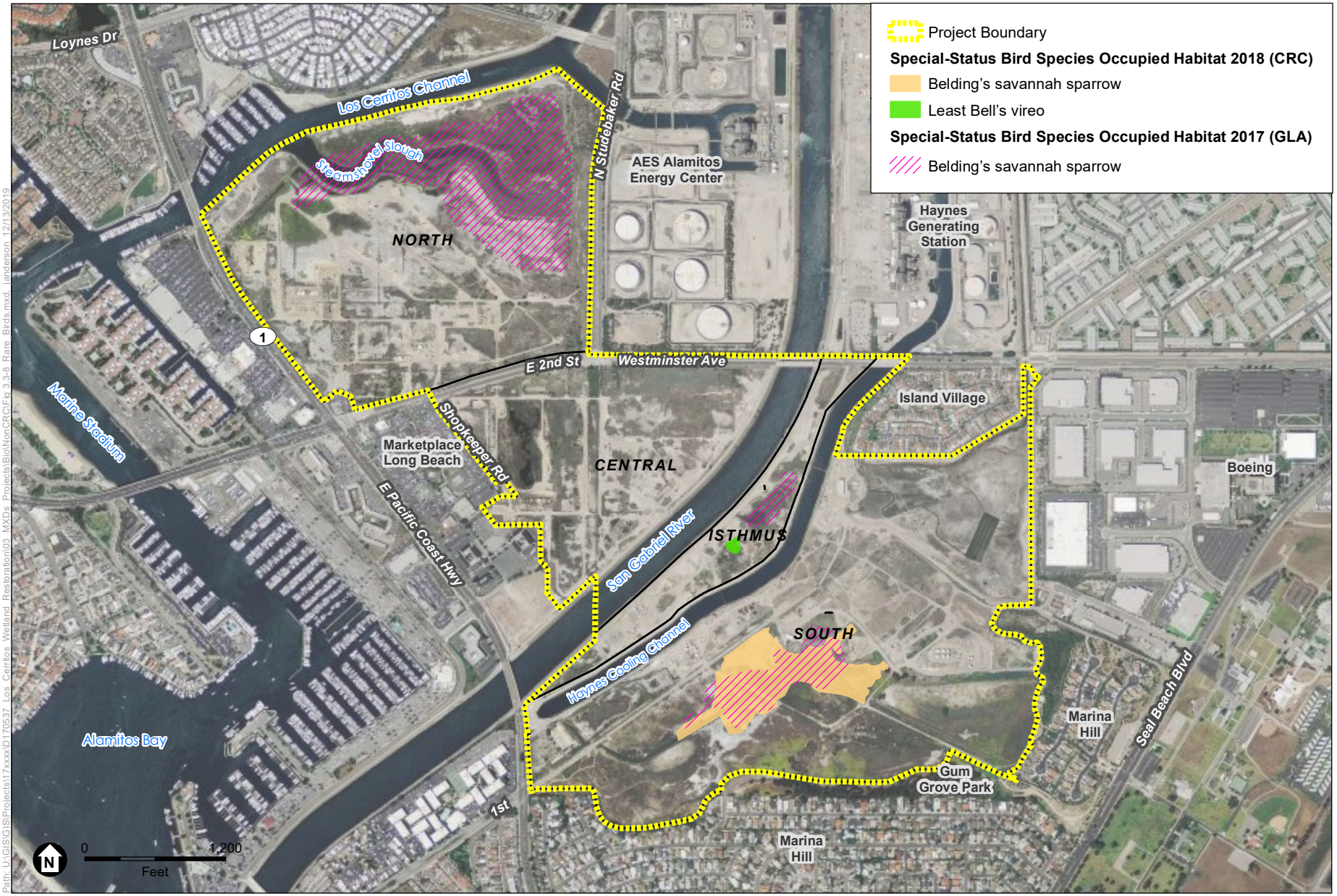
Habitat occupied by Belding's savannah was observed in the South, Isthmus, and North Areas and was not observed in the Central Area as depicted in **Figure 3.3-8**, *Special-Status Bird Species Occupied Habitat*. The South, Central, Isthmus, and North Areas provide suitable foraging and nesting habitat for the species. Ecosystem restoration activities would result in potentially significant direct impacts on the Belding's savannah sparrow from grading activities and removal of suitable nesting and foraging habitat, as well as indirect impacts from noises, vibrations and dust generated from heavy equipment. The proposed program would improve and expand the existing habitat conditions following the completion of restoration activities. However, temporary impacts to existing habitat from implementation of the restoration impacts would be less than significant with the implementation of Mitigation Measures BIO-2 and BIO-3, which requires implementation of a WEAP, biological monitoring, a minimum habitat replacement ratio of 1:1 (created:impacted); Mitigation Measure BIO-4 that requires minimization and avoidance measures for preserving active bird nests; and Mitigation Measure BIO-9, which requires re-establishment of permanent and temporary impacts to CDFW Sensitive Natural Communities.

Black Skimmer

Black skimmer has been observed foraging within the program area and is expected to forage in the South, Central, and North Areas; however, there are no potential breeding areas present in the program boundary. The Isthmus Area does not contain suitable habitat for the species. Ecosystem restoration activities, flood risk and stormwater management, and infrastructure and utility modifications along aquatic areas within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel) may temporarily affect foraging activities for brief periods; however, given that expansive areas of foraging areas that exist elsewhere within these waterways, such short-term and localized impacts on black skimmer would not be considered significant.

Burrowing Owl

Wintering burrowing owls have been observed in the Isthmus Area; however, they have not been observed in the South, Central, or North Areas or during the breeding season in the program area. Nevertheless, suitable habitat is present in the South, Isthmus, Central, or North Areas. Ecosystem restoration activities, development of public access and visitor facilities, and infrastructure and utility modifications exhibit potential for direct and indirect impacts on wintering individuals; should a burrowing owl or owls occupy the program area prior to program activities. In accordance with Mitigation Measures BIO-2 and BIO-5, potential impacts on burrowing owl would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys and specific avoidance measures.



SOURCE: Mapbox, LCWA, Coastal Restoration Consultants, Glenn Lukos Associates

Los Cerritos Wetlands Restoration Plan Draft Program EIR

Figure 3.3-8

Special-Status Bird Species Occupied Habitat

ESA

California Black Rail

California black rail has not been observed in the program area and is not expected to occur within the South, Isthmus, Central, and North Areas. However, suitable habitat is present in the North Area (Steamshovel Slough) and other marsh areas in the South, Isthmus, and Central Areas. Ecosystem restoration activities and infrastructure and utility modifications exhibit potential for direct impacts. In addition, indirect impacts on California black rail could occur through disruption of breeding and nesting from construction noise and dust. Impacts on California black rail would be less than significant following implementation of a WEAP and biological monitoring as identified in Mitigation Measure BIO-2 and pre-construction nesting bird surveys and avoidance as identified in Mitigation Measure BIO-4. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including California black rail; therefore, implementation of the proposed program would have a net benefit on this species.

California Brown Pelican

California brown pelican have been observed foraging within the program area and is expected to forage in the South, Central, and North Areas; however, there are no potential breeding areas in the program boundary. The Isthmus Area does not contain suitable habitat for the species. Ecosystem restoration activities, flood risk and stormwater management and infrastructure and utility modifications along aquatic areas within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel) may temporarily affect foraging activities for brief periods; however, given that expansive foraging areas exist elsewhere within these waterways, such short-term and localized impacts on California brown pelicans would not be considered significant.

California Least Tern

California least tern have been observed foraging within the South, Isthmus, Central, and North Area; however, there are limited potential breeding areas on salt flats located within the proposed program. Ecosystem restoration activities, flood risk and stormwater management, and infrastructure and utility modifications along aquatic areas within the North Area (Steamshovel Slough), Central Area (San Gabriel River), and South Area (Haynes Cooling Channel) exhibits potential for affecting foraging activities for brief periods; however, given that expansive foraging areas exist elsewhere within these waterways, such short-term and localized impacts on California least tern foraging habitat is considered temporary and not significant. Potential impacts on California least tern would be avoided and minimized through implementation of a WEAP and biological monitoring as identified in Mitigation Measure BIO-2 and pre-construction bird surveys and avoidance as identified in Mitigation Measure BIO-4. Since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including California least tern; implementation of the proposed program would have a net benefit on this species.

Coastal California Gnatcatcher

Coastal California gnatcatcher has not been observed within the program area; the potential for this species to occur is considered low. However, there is suitable foraging and breeding habitat present within the program area. Suitable habitat is present in the South, Isthmus, Central, and

North Areas. To ensure that this species is not impacted during ecosystem restoration activities, development of public access, and infrastructure and utility modifications activities, implementation of a WEAP and biological monitoring as identified in Mitigation Measure BIO-2 and pre-construction nesting avian surveys and avoidance as identified in Mitigation Measure BIO-4 shall be conducted. Implementation of this mitigation measure would reduce potential impacts to coastal California gnatcatcher to a level of less than significant.

Least Bell's Vireo

Least Bell's vireo has been observed foraging within the Isthmus Area and suitable foraging habitat also occurs in the Central and North Areas; however, no breeding behavior or nesting territories have been documented in the program area and nesting habitat within the program area is considered marginal at best. The species has been documented breeding just south of the program area in the Heron Pointe Bioswale. Suitable foraging habitat exists in the Isthmus, Central, and North Areas. Nevertheless, ecosystem restoration activities that would occur near potential riparian foraging and nesting habitat may temporarily impact this species, which could result in significant impacts. However, potential impacts would be reduced to a level of less than significant through implementation of Mitigation Measures BIO-2 and BIO-4, which requires implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance measures.

Loggerhead Shrike

Loggerhead shrike ~~have~~ has been observed foraging within the program area and is expected to forage within the South, Isthmus, Central and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications could result in significant direct and indirect impacts on the loggerhead shrike if this species was found to be nesting on site. Potential nesting impacts to loggerhead shrike will be avoided and minimized through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4; therefore, impacts to this species is considered less than significant.

Merlin

Merlin ~~have~~ has been observed within the program area; however, there is no potential breeding habitat on site within the South, Isthmus, Central and North Areas. Suitable foraging habitat occurs within the South, Isthmus, Central and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications exhibit potential for affecting foraging activities for brief periods; however, given that expansive areas of foraging areas both on site and off site are available, such short-term and localized impacts would not be considered significant.

Northern Harrier (Nesting)

Northern harrier ~~have~~ has occasionally been observed foraging within the program area; however, there are no records of this species nesting within the program area. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications associated with the proposed program could result in significant impacts on the northern harrier if this species was

found to be nesting within the program area. However, such impacts to northern harrier would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Osprey

Osprey have occasionally been observed foraging within the program area; however, there are no records of this species nesting within the program area. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications associated with the proposed program could result in significant impacts on the osprey if this species was found to be nesting within the program area. However, such impacts to osprey would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Ridgway's Rail

The Ridgway's rail has not been observed within the program area, but had potential to occur within the North Area where suitable Pacific cordgrass habitat is present in Steamshovel Slough as well as within the Isthmus and South Areas. They have never been documented nesting within the proposed program as suitable breeding habitat does not exist due to lack of tall cordgrass or brackish marsh vegetation. Ecosystem restoration activities, flood risk and stormwater management, and development of public access associated with the proposed program could result in potential direct impacts should a Ridgway's rail be nesting within or adjacent to areas that will be disturbed from grading activities. In addition, indirect impacts on Ridgway's rail could occur through disruption of nesting or other essential behaviors from construction noise and dust. Potential impacts on Ridgway's rail would be avoided and minimized through implementation of a WEAP, biological monitoring, pre-construction nesting bird surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including Ridgway's rail; therefore, implementation of the proposed program would have a net benefit on this species.

Short-Eared Owl

Short-eared owl has been observed foraging within the program area; however, there are no records of this species nesting within the program area. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications activities associated with the proposed program could result in significant impacts on the short-eared owl if this species was found to be nesting on site. However, potential impacts to nesting short-eared owls would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Southern California Rufous-Crowned Sparrow

Southern California rufous-crowned sparrow have not been observed within the program area during various surveys and site assessments; therefore, the potential for this species to occur is considered low. However, there is suitable foraging and breeding habitat present within the

program area, including the South, Isthmus, Central, and North Areas. To ensure that this species is not impacted during ecosystem restoration activities, development of public access and infrastructure and utility modifications activities, implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4 shall be conducted. Implementation of these mitigation measures would reduce potential impacts to Southern California rufous-crowned sparrow to a level of less than significant.

Southwestern Willow Flycatcher

Southwestern willow flycatcher has not been observed foraging within the program area and there is no suitable breeding habitat present within the program area. Suitable foraging habitat is limited to the Isthmus, Central, and North Areas. Because suitable riparian woodland breeding habitat is absent in the program area, the potential for this species to occur is considered low. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications activities associated with the proposed program could result in potential direct impacts to migrants that may forage within the program area. However, potential impacts on southwestern willow flycatcher would be avoided and minimized through the implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4 shall be conducted. Implementation of these mitigation measures would reduce potential impacts to southwestern willow flycatcher to a level of less than significant.

Tri-Colored Blackbird

Tri-colored blackbird has ~~not~~ been observed in 2015 by the El Dorado Audubon Society at the Marketplace Marsh within the program area and there is potential for the species to nest and forage on marshland located within the Central Area. Suitable foraging habitat is present in the South, Isthmus, Central, and North Areas. ~~As such, the potential for this species to occur is considered low.~~ Ecosystem restoration activities, including development of public access, infrastructure and utility modifications activities associated with the proposed program, could result in potential direct impacts to foraging and nesting tri-colored blackbird, if present. Potential impacts on tri-colored blackbird would be avoided and minimized through the implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4 shall be conducted. Implementation of these mitigation measures would reduce potential impacts to tri-colored blackbird to a level of less than significant.

Western Snowy Plover

The western snowy plover has not been observed foraging or nesting within the program area but there is potential for the species to nest on salt flats located within the Central Area. It is not expected to nest within the South, Isthmus, or North Areas. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities and flood risk and stormwater management activities associated in the North Area (Steamshovel Slough) and other tidal areas in the South, Isthmus and Central Areas would temporarily remove potential foraging and nesting habitat. Potential impacts on western snowy plover would be avoided and minimized through implementation of a WEAP, biological monitoring, pre-construction bird surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4. Moreover, the loss

of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including western snowy plover; therefore, implementation of the proposed program would have a net benefit on this species.

White-Tailed Kite

White-tailed kite have been observed foraging within the program area and there are limited potential nesting sites located on eucalyptus trees located in the South, Isthmus, Central and North Areas. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modifications activities within the South, Isthmus, Central, and North Areas could result in significant impacts on white-tailed kite if this species was found to be nesting on site. However, potential impacts to would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Yellow Rail

Yellow rail has not been observed within the program area; however, suitable freshwater marsh habitat is present within the South, Central and North Areas. Ecosystem restoration activities, including flood risk and stormwater management and development of public access associated with the proposed program, could result in potential direct impacts should a yellow rail be nesting within or adjacent to areas that will be disturbed from these activities. In addition, indirect impacts on yellow rail could occur during nesting from adjacent noise, vibrations and dust generated during construction activities. However, potential impacts on yellow rail would be avoided and minimized through implementation of a WEAP, biological monitoring, pre-construction nesting bird surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4. Moreover, the loss of suitable habitat during grading is considered temporary and less than significant, since the purpose of the proposed program is to enhance and restore habitat that is suitable for wildlife, including yellow rail; therefore, implementation of the proposed program would have a net benefit on this species.

Yellow Warbler

Yellow warbler has not been observed nesting or foraging within the program area and nesting habitat is not present; however, suitable foraging habitat occurs within the Isthmus Area. Ecosystem restoration activities, including development of public access and infrastructure and utility modification activities associated with the proposed program, could result in potential impacts on the foraging yellow warblers. However, potential impacts would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Yellow-Breasted Chat

Yellow-breasted chat has been observed foraging within the program area; however, there are no records of this species nesting within the program area and there is no nesting habitat present. Suitable foraging habitat occurs within the South, Isthmus, Central, and North Areas. Ecosystem restoration activities, development of public access, and infrastructure and utility modification

activities associated with the proposed program could result in significant impacts on the yellow-breasted chat if this species was found to be nesting on site. However, potential impacts to would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Nesting Birds

Habitat within the South, Isthmus, Central, and North Areas has the potential to support a variety of nesting birds. Impacts to migratory and resident nesting avian species are prohibited under the MBTA as well as provisions of the California Fish and Game Code. Ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities, and infrastructure and utility modifications associated with the proposed program could result in potential impacts to nesting birds and raptors. However, impacts would be less than significant through implementation of a WEAP, biological monitoring, pre-construction nesting avian surveys, and avoidance as identified in Mitigation Measures BIO-2 and BIO-4.

Marine Mammals

Harbor seal and California sea lion have both been observed within the program area and the Central and North Areas provide open water habitat for these species; however, suitable habitat does not occur within the South or Isthmus Areas as open waters which occur are either blocked by culverts that are too small to allow passage or contain grates which prevent entry. Impacts to marine mammal species are prohibited under the MMPA. There is low potential for ecosystem restoration activities and flood risk and stormwater management activities to impact marine mammal species if impacts within the North Area (Steamshovel Slough) and Central Area (San Gabriel River) occur due to the limited size and scope of activities along the banks of areas containing open water. Although, work activities may occur along the open water-land interface, work activities will avoid deeper areas away from the banks where marine mammals are more likely to occur. Impacts to marine mammals are not anticipated to occur within the South or Isthmus areas. In accordance with Mitigation Measures BIO-2 and BIO-8, potential impacts on marine mammals would be less than significant through implementation of a WEAP, biological monitoring, pre-construction surveys, and specific avoidance measures.

Operation

Operational impacts associated with the ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities, and infrastructure and utility modifications could result in an adverse indirect minor impacts to special-status species, such as the introduction and spread of noxious, invasive weeds that could compete with native plants for water and nutrients and alter habitat conditions for some wildlife species. Such indirect impacts caused by the invasion of weed species would be reduced through implementation of Mitigation Measure BIO-1, which requires the preparation and implementation of weed management, maintenance, and monitoring procedures.

Operation impacts associated with nighttime lighting of the visitor center and parking lot areas include disruption to nocturnal wildlife species that could affect their breeding and foraging habits. Without proper placement and/or shielding, light trespass and/or glare onto wildlife habitat

areas from these nighttime lighting sources could occur. Implementation of Mitigation Measure BIO-6 would minimize nighttime lighting impacts on wildlife by requiring the preparation of a lighting plan and requiring that nighttime lighting is shielded downward to minimize spillage onto adjacent areas; therefore, impacts would be less than significant.

Lastly, the proposed program would not have an effect on tidal-influenced or storm-generated water levels based on modeling of sea-level rise scenarios (see Section 3.8, *Hydrology and Water Quality*, of this PEIR); therefore, no impacts to tidal marsh-dependent species would occur following the installation and/or relocation of the ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities and infrastructure and utility modifications.

Mitigation Measures

Mitigation Measure BIO1: Avoidance of Special-Status Plants. Prior to ~~ground-disturbing activities (e.g., vegetation removal and grading)~~ LCWA's approval of project plans or publication of subsequent CEQA documents, a qualified botanist/biologist shall conduct a habitat assessment to determine the presence or absence of suitable habitat for special-status plant species. If suitable habitat is determined to be present, focused plant surveys should be conducted in accordance with Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities (CDFW, March 20, 2018). Consistent with the CDFW protocol, such focused special-status plant surveys will be conducted during the appropriate blooming period for these species, with May and June likely having the highest number of species in flower. The results of focused special-status plant species will be incorporated into restoration design plans. The locations of any special-status plants within 25 feet of proposed disturbance areas shall be identified and mapped. Individual plants shall be flagged for avoidance and an avoidance buffer of at least 10 feet shall be established around the plant(s).

If special-status plants cannot be avoided, they shall be incorporated into the proposed program's restoration design at a minimum ratio of 1:1 (one plant planted for every one plant removed, or 1 square foot of absolute cover planted for every 1 square foot of absolute cover removed). For special-status plant species with small population numbers (less than 50 individuals), higher mitigation ratios up to 7:1 will be incorporated, where on-site seed sources are available. Higher mitigation ratios of up to 3:1 will be incorporated where suitable habitat area can support populations of large individual numbers. Special-status plants that cannot be avoided shall be salvaged prior to impacts using species-specific propagation methods, such as transplanting, seed and cuttings. Seed collection shall occur during the appropriate time of year for each species. Seeds shall be propagated by a qualified horticulturalist or in a local nursery, and shall be incorporated into habitat-specific seed mixes that will be used for revegetation of the restoration areas. Plant transplantation of perennial species is a potential mitigation technique but must be used sparingly and only when receiving site parameters are a suitable match from the donor location. Performance standard for the success of propagated or transplanted species will be achieved with the survival of the appropriate number of individuals meeting the mitigation ratio (1:1 for most species) after five years of growth and the establishment of a self-propagating population for annual species for a minimum of three years after revegetation completion for a specific area.

Mitigation Measure BIO-2: Environmental Awareness Training and Biological Monitoring. Prior to commencement of activities within the program area, a qualified biologist shall prepare a Worker Environmental Awareness Program (WEAP) that provides a description of potentially occurring special-status species and methods for avoiding inadvertent impacts. The WEAP training shall be provided to all construction personnel. Attendees shall be documented on a WEAP training sign-in sheet.

Initial grading and vegetation removal activities shall be supervised by a qualified monitoring biologist, who will be present during all construction activities. The biologist shall ensure that impacts to special-status plants and wildlife, including wetland vegetation, are minimized to the greatest extent feasible during implementation of program activities on the South, Isthmus, Central and North Areas. If any special-status wildlife species are encountered during construction and cannot be avoided, the monitoring biologist shall have the authority to temporarily halt construction activities until a plan for avoidance has been prepared and approved by CDFW, and implemented by the monitoring biologist. Relocation of a federal- or state-listed species shall not be allowed without first obtaining take authorization from USFWS and/or CDFW.

Mitigation Measure BIO-3: Belding's Savannah Sparrow Breeding Habitat. ~~Prior to the commencement of activities within the program area~~ Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, a qualified biologist shall map suitable Belding's savannah sparrow habitat as the location and amount of suitable habitat is anticipated to change over time. The results of habitat mapping will be incorporated into restoration design plans. Project activities shall be limited to July 16 through February 14 within suitable costal marsh habitat to avoid impacts to breeding Belding's savannah sparrow. Suitable Belding's savannah sparrow breeding habitat that will be impacted by the proposed program shall be created within the program area at a minimum ratio of 1:1 (area created:area impacted). Restored breeding habitat shall consist of a minimum 60 percent absolute cover of salt marsh vegetation, and shall consist of a hydrologic regime similar to that currently present in the North Area or South Area, respectively. Other unique conditions within coastal salt marsh communities shall exist as well, such as, similar slope, aspect, elevation, soil, and salinity. A Mitigation, Maintenance and Monitoring Program shall be prepared and approved by CDFW prior to implementation. The proposed program shall be implemented by a qualified restoration ecologist, and at a minimum, shall include success criteria and performance standards for measuring the establishment of Belding's savannah sparrow breeding habitat, responsible parties, maintenance techniques and schedule, 5-year monitoring and reporting schedule, adaptive management strategies, and contingencies. Moreover, in accordance the CESA, an Incidental Take Permit (or other mitigation options identified in accordance with Fish & Game Code, §§ 2080.1, 2081, subds. (b) and (c)) shall be obtained from CDFW if any Belding's savannah sparrow may be impacted during construction or operations of the program. The amount of potential take shall be determined prior to design approval of each restoration area based on consultation with CDFW. Lastly, take authorization shall be obtained prior to commencement of any ground disturbing activities.

Mitigation Measure BIO4: Nesting Bird and Raptor Avoidance. A qualified biologist shall identify areas where nesting habitat for birds and raptors is present ~~prior to the commencement of activities within the program area~~ prior to LCWA's approval of

project plans or publication of subsequent CEQA documents. To ensure the avoidance of impacts to nesting avian species, the following measures shall be implemented:

- Construction and maintenance activities shall be limited to the non-breeding season (September 1 through December 31) to the extent feasible. If construction or maintenance activities will occur during the avian nesting season (January 1 through August 31), a qualified biologist shall conduct pre-construction nesting avian surveys within no more than 5 days prior to the initiation of construction activities to identify any active nests. If a lapse in work of 5 days or longer occurs, another survey shall be conducted to verify if any new nests have been constructed prior to work being reinitiated.
- If active nests are observed, an avoidance buffer shall be demarcated by a qualified biologist with exclusion fencing and shall be maintained until the biologist determines that the young have fledged and the nest is no longer active.

Mitigation Measure BIO5: Habitat Assessment and Pre-Construction Surveys for Burrowing Owl. A qualified biologist shall conduct a pre-construction burrowing owl survey of each restoration area (including required survey buffer areas) prior to LCWA's approval of project plans or publication of subsequent CEQA documents. the program area within suitable habitat prior to construction activities. If burrowing owls are detected, the habitat will be avoided and/or enhanced by the restoration design. In addition, a Burrowing Owl Management Plan shall be prepared and approved by CDFW, and implemented, prior to commencement of construction. The Burrowing Owl Management Plan shall be prepared in accordance with the CDFW 2012 Staff Report on Burrowing Owl Mitigation and shall address specific minimization and avoidance measures for burrowing owls, such as avoidance of occupied habitat, translocation of individuals, and on site revegetation.

Mitigation Measure BIO-6: Minimization of Light Spillage. A Program Lighting Plan shall be designed to minimize light trespass and glare into adjacent habitat areas prior to the commencement of activities within the program area. Nighttime lighting associated with the visitor center, parking lot, and trails shall be shielded downward and/or directed away from habitat areas to minimize impacts to nocturnal species, including breeding birds.

Mitigation Measure BIO-7: Pre-Construction Bat Surveys. A qualified biologist shall conduct a pre-construction bat survey of each restoration area prior to final approval of the area's restoration plan. the program area prior to construction activities. If suitable bat roosting habitat is determined to be present, a presence/absence survey shall be conducted Pprior to commencement of construction activities. A, a qualified biologist shall conduct thea preconstruction clearance survey of suitable bat roosting habitat, such as mature palm trees. If bats are determined to be roosting, the biologist will determine whether it is a day roost (non-breeding) or maternity roost (lactating females and dependent young). If a day roost is determined, the biologist shall ensure that direct mortality to roosting individuals will not occur by requiring that trees with roosts are not directly impacted (e.g., removed) until after the roosting period.

If a maternity roost is determined to be present, the biologist shall determine a suitable buffer distance between construction activities and the roosting site. If direct disturbance to the maternity roost could occur, a Bat Exclusion Plan shall be prepared and approved by CDFW, and implemented, prior to impacting the roost. At a minimum, the Plan shall

include avoidance and minimization measures to reduce potential impacts to breeding bats during construction activities and prescribed methods to safely and humanely evict bats from the roost to avoid mortality.

Mitigation Measure BIO-8: Focused Surveys for Special-Status Wildlife Species. Should suitable habitat occur for terrestrial or aquatic special-status species, a qualified biologist shall conduct focused habitat assessments and focused surveys to determine presence, absence and/or abundance for special-status wildlife species listed in Table 3.3-~~4~~5. Both habitat assessments and focused surveys shall occur prior to LCWA's approval of the project plans or the publication of subsequent CEQA documents for any project site that potentially contains special-status species. Agency-approved protocols shall be used for specific species where appropriate during the required or recommended time of year. For all other target (special-status) species, prior to initiating surveys, survey methods shall be verified and approved in writing by CDFW and USFWS or NMFS for all state- and/or federally-protected species, respectively. If special-status species are detected, the project-specific restoration plan should be designed to minimize impacts to special-status wildlife to the greatest extent feasible and a Wildlife Avoidance Plan shall be prepared and approved by CDFW and USFWS or NMFS prior to commencement of construction. The Wildlife Avoidance Plan shall include specific species minimization and avoidance measures, measures to minimize impacts to occupied habitat, such as avoidance and revegetation, as well as relocation/translocation protocols. The plan shall require that a qualified biological monitor approved by CDFW be onsite prior to and during ground and habitat disturbing activities to move special status species or other wildlife of low mobility out of harm's way that could be injured or killed by ground disturbing activities.

If special-status species cannot be avoided, Incidental Take Permits from the National Marine Fisheries Service or United States Fish and Wildlife Service and California Department of Fish and Wildlife will be required. The amount of potential take shall be determined prior to design approval of each restoration area based on consultation with NMFS or USFWS and CDFW and take authorization shall be obtained prior to commencement of any ground disturbing activities. If an incidental take permit is being obtained, compensatory mitigation for the loss of occupied habitat shall be provided through purchase of credit from an existing mitigation bank, private purchase of mitigation lands, or on-site preservation, as approved by the resource agencies. Compensatory mitigation shall be provided at a minimum 1:1 ratio to reduce potential effects to less-than-significant levels.

Significance after Mitigation

Less than Significant with Mitigation

Impact BIO-2: The proposed program would result in a significant impact if the proposed program would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or United States Fish and Wildlife Service.

Construction

Direct impacts would be limited to grading necessary to reintroduce tidal flows, restore native plant communities, construction of the trails and berms, as well as temporary impacts associated with enhancement and development of berms and trails, and infrastructure and utility modifications. The following CDFW Sensitive Natural Communities and riparian habitats are present within the program area: *Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance, *Arthrocnemum subterminale* Herbaceous Alliance, *Baccharis salicina* Provisional Shrubland Alliance, *Cressa truxillensis – Distichlis spicata* Herbaceous Alliance, *Frankenia salina* Herbaceous Alliance, *Isocoma menziesii* Shrubland Alliance, *Leymus cinereus – Leymus triticoides* Herbaceous Alliance, *Salicornia pacifica* Herbaceous Alliance, *Salix gooddingii* Woodland Alliance, *Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance and *Spartina foliosa* Herbaceous Alliance. Impacts associated with implementation of the proposed program will consist of grading, berm installation, fill for the overlook terrace, berm/road removal, sidewalk grading, and relocation of infrastructure and utilities. These direct impacts would be temporary given that these areas would be restored to coastal salt marsh, transitional wetland, or other native habitat as part of the proposed program. As such, there would be no net loss of habitat following implementation of the proposed program.

Signs would be installed along restored trails to inform the public of the sensitive habitats and to prohibit access into the restoration areas. Trails would be separated from the wetland areas by native upland buffer. A visitor center would be constructed on an existing raised building pad. In addition, temporary impacts would be mitigated with implementation of Mitigation Measure BIO-9 that requires reestablishment of Sensitive Natural Communities that will be impacted by restoration activities.

There are several aboveground pipelines and racks sited throughout the program boundary, many of which occur over wetland areas and will need to be removed. Based on the method of pipeline, rack, and tank removal, and the already disturbed areas that would be used to facilitate the removals, no impacts to CDFW Sensitive Natural Communities or riparian habitats are expected to occur. However, in the event that inadvertent and temporary impacts to Sensitive Natural Communities or riparian habitats occur, potentially significant impacts would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-9.

Operation

Operational impacts associated with the ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities, and infrastructure and utility modifications could result in adverse direct impacts to Sensitive Natural Communities or riparian habitats, such as the introduction and spread of noxious, invasive weeds that could compete with native plants for water and nutrient and alter the composition of communities. Such direct impacts caused by the invasion of weed species would be reduced through implementation

of Mitigation Measure BIO-1, which requires the preparation and implementation of weed management, maintenance and monitoring procedures and Mitigation Measure BIO-9 which requires the revegetation of sensitive natural communities.

Mitigation Measure

Mitigation Measure BIO-9: Revegetation of Sensitive Natural Communities. Sensitive natural communities located on the program area include: *Anemopsis californica – Helianthus nuttallii – Solidago spectabilis* Herbaceous Alliance, *Arthrocnemum subterminale* Herbaceous Alliance, *Baccharis salicina* Provisional Shrubland Alliance, *Cressa truxillensis – Distichlis spicata* Herbaceous Alliance, *Frankenia salina* Herbaceous Alliance, *Isocoma menziesii* Shrubland Alliance, *Leymus cinereus – Leymus triticoides* Herbaceous Alliance, *Salicornia pacifica* Herbaceous Alliance, *Salix gooddingii* Woodland Alliance, *Schoenoplectus californicus – Typha (angustifolia, domingensis, latifolia)* Herbaceous Alliance and *Spartina foliosa* Herbaceous Alliance.

Prior to ~~impacts to Sensitive Natural Communities~~ LCWA's approval of project plans or publication of subsequent CEQA documents, the area(s) that will be impacted shall be delineated and quantified using current Global Information System (ArcGIS) mapping software. Sensitive Natural Communities that will be impacted by the proposed program shall be created within the program area at a minimum ratio of 1:1 (area created:area impacted). A mitigation ratio of a minimum 2:1 for natural communities with a rarity ranking of S3 or higher will be incorporated into the restoration designs. Restored Sensitive Natural Communities shall consist of a minimum 60 percent absolute vegetation cover and shall include community-specific growing conditions, such as, similar slope, aspect, elevation, soil, and salinity. Moreover, soils within mudflat areas shall be salvaged (where feasible) for areas that are proposed for activities such as grading, and reintroduced in new mudflat and/or wetland areas that will be created. A Mitigation, Maintenance and Monitoring Program shall be prepared and approved by CDFW prior to implementation. The Program shall be implemented by a qualified restoration ecologist, and at a minimum, shall include success criteria and performance standards for measuring the establishment of Sensitive Natural Communities, responsible parties, maintenance techniques and schedule, 5-year monitoring and reporting schedule, adaptive management strategies, and contingencies.

Significance after Mitigation

Less than Significant with Mitigation

Impact BIO-3: The proposed program would result in a significant impact if the proposed program would have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal wetlands) through direct removal, filling, hydrological interruption, or other means.

Construction

Direct impacts to jurisdictional waters and wetlands would occur on all four areas. However, the impacts that would occur are associated with the implementation of the proposed program, which would result in long-term preservation, restoration and enhancement of waters of the United States/state. As such, no compensatory mitigation for temporary loss of waters of the United

States/state is required; however, permits and/or approvals from the USACE, RWQCB, CDFW, and the CCC would be required for impacts to resources under their jurisdiction.

Permanent and temporary impacts to wetlands and other waters of the United States/state, including features subject to CDFW jurisdiction and coastal wetlands, would be restored in accordance with a Restoration Plan and Mitigation Measure BIO-9. This includes temporary direct impacts to jurisdictional resources during the creation of tidal channels. The habitat types proposed for restoration will include coastal salt marsh and transitional wetland habitats, as well as establishment of upland scrub buffers. The primary goal of the proposed program is the restoration and expansion of coastal salt marsh throughout much of the program area including on existing oil production facilities, much of which includes jurisdictional waters. There will be a net increase in jurisdictional wetlands and waters following implementation of the proposed program.

Operation

The proposed program includes consolidation and abandonment of oil wells and associated racks and pipelines. Based on the guidelines set forth for removal by the California Geologic Energy Management Division (CalGEM) and the already disturbed areas that surround the wells that would be used to facilitate the removals, impacts to jurisdictional wetlands or waters are not anticipated. By restoring tidal connection, the proposed program could impact but is not anticipated to significantly affect wetland habitats by allowing rising sea levels to enter and flood the marsh. In some locations, such as in the South Area, the new tidal connection to the Haynes Cooling Channel would improve the hydrology in the wetlands with sea-level rise as compared to existing conditions, where drainage would be limited under sea-level rise. In the Central Area, the existing tidal connection provides only minor inundation of the site, and the proposed program would expand this and create much more tidal salt marsh. With sea-level rise, there would still be more tidal marsh for a longer period of time and with more natural hydrology in the Central Area under the program than under Existing Conditions. However, it is also anticipated that portions of the restored habitat would eventually convert from tidal marsh to mudflat and eventually subtidal habitat. As part of the Hydrodynamics Modeling Technical Report (ESA 2020), State projections (OPC 2018) were used to develop sea-level rise scenarios for the program. The scenarios identify 1.7 feet of sea-level rise between 2040 and 2070 and 3.3 feet of sea-level rise between 2070 and 2110. The Hydrodynamic Modeling Technical Report also provides habitat elevation bands and how the elevations are expected to change over time with sea-level rise. Grading plans developed during the design phase of projects within the proposed program will evaluate the balance of marsh habitat today and into the future based on the habitat elevation bands. An in-depth analysis and discussion of sea-level rise can be found in Section 3.8, *Hydrology and Water Quality*, of this PEIR.

The primary goal of the proposed program is the restoration and expansion of coastal salt marsh throughout much of the program area including on existing oil production facilities, much of which includes jurisdictional waters. As indicated above, there will be a net increase in jurisdictional wetlands and waters following implementation of the proposed program. Any inadvertent impacts that may occur to jurisdictional wetlands during the oil operation abandonment period would be restored in accordance with a Restoration Plan and Mitigation Measure BIO-9. Impacts to jurisdictional waters and wetlands would be less than significant with the implementation of a Monitoring and Adaptive Management Plan and Mitigation Measure

BIO-9, Mitigation Measure BIO-10 that requires a jurisdictional delineation and issuance of jurisdictional resources permits as well as Mitigation Measure BIO-11 that requires a functional assessment of the wetland areas that will be restored in the program area.

Mitigation Measure

Mitigation Measure BIO-10: Jurisdictional Resources Permitting. ~~Prior to project construction~~Prior to LCWA's approval of project plans or publication of subsequent CEQA documents, a jurisdictional delineation report shall be prepared that describes these jurisdictional resources and the extent of jurisdiction under the USACE, RWQCB, CDFW, and CCC. If it is determined during final siting that jurisdictional resources cannot be avoided, the project applicant shall be subject to provisions as identified below:

1. If avoidance is not feasible, prior to ground disturbance activities that could impact these aquatic features, the project applicant shall file the required documentation and receive the following.
    a. Nationwide Permit or equivalent permit issued from USACE;
    b. Water Quality Certification issued from the Los Angeles RWQCB;
    c. Streambed Alteration Agreement issued from CDFW; and
    d. Coastal Development Permit issued from CCC.
2. Compensatory mitigation for impacts to jurisdictional resources is not anticipated as the proposed program's goal is the restoration and expansion of coastal salt marsh within the proposed program.
3. The project proponent shall comply with the mitigation measures detailed in permits issued from the USACE, RWQCB, CDFW, and CCC.

Mitigation Measure BIO-11: Monitoring and Adaptive Management Plan. In conjunction with Section 3.8, *Hydrology and Water Quality*, a Monitoring and Adaptive Management Plan (MAMP) shall be prepared and implemented prior to commencement of construction or restoration activities. The MAMP shall provide a framework for monitoring site conditions in response to the proposed program implementation. The MAMP shall include provisions for conducting a pre-construction survey to collect baseline data for existing wetland function. The MAMP shall require that monitoring focus on the functional wetland values as well as sediment quality in areas subject to the greatest deposition from storm events and that are also not subject to regular tidal flushing, (e.g., the southwestern corner of the Long Beach Property site). The MAMP shall identify habitat functions, such as biotic structure and hydrology, that shall be monitored as part of the proposed program's monitoring and reporting requirements. The MAMP shall identify sediment quality monitoring requirements that shall be performed at a frequency that would capture the potential build-up of contaminants in the deposited sediment before concentration are reached that would impact benthic macro-invertebrates and other sensitive species. The MAMP shall require that the findings of the monitoring efforts be used to identify any source of functional loss of wetlands and water quality impairment, and if discovered, provide measures to improve wetland function and for remediation of the sediment source area(s). Upon completion of restoration activities, the proposed program shall demonstrate a no net loss of aquatic resource functions and demonstrate an increase in wetland functions and values throughout the entire site.

The MAMP shall be submitted for review and approval to responsible permitting agencies prior to commencement of construction or restoration activities.

Significance after Mitigation

Less than Significant with Mitigation

Impact BIO-4: The proposed program would result in a significant impact if the proposed program would interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Construction

The San Gabriel River levees act as a terrestrial wildlife corridor and are the only terrestrial wildlife corridor within or adjacent to the program area. Terrestrial wildlife movement within the program area is primarily localized due to the surrounding urban landscape that includes Pacific Coast Highway, Studebaker Road, and Westminster Boulevard. The San Gabriel River levees will continue to be operated and maintained by the LACFCD and segments are anticipated to be directly impacted by construction activities to facilitate improvement of wildlife movement and nursery sites. Direct impacts to the San Gabriel River levees, which include breaching segments, are not considered significant as project impacts will restore habitats adjacent to the levees providing additional opportunities for terrestrial wildlife movement adjacent to the levees. Temporary increases in noise and dust may have a temporary indirect impact to terrestrial wildlife movement. However, such indirect impacts are not considered significant as an existing bike bath, Pacific Coast Highway and Westminster Boulevard provide a high level of disturbance to terrestrial wildlife movement in the program area. Furthermore, future project impacts will restore habitats adjacent to the levees providing additional opportunities for terrestrial wildlife movement in the program area. The Alamitos Bay, Los Cerritos Channel, Steamshovel Slough, Haynes Cooling Channel and San Gabriel River could provide limited movement into and out of the program area for marine fish, mammals, or reptiles species (i.e., green sea turtle). However, the San Gabriel River and Alamitos Bay are the only waterways that have an outlet and have connectivity to other water bodies allowing a corridor for marine animals to move through the program area. Fish species that are managed under the Coastal Pelagic Fishery Management Plan and the Pacific Groundfish Fishery Managed Plan potentially could swim into the channel; however, the ~~Further,~~ Alamitos Bay, Los Cerritos Channel, and Steamshovel Slough would be avoided during construction activities and no in-water work would occur within these waterways. ~~Such p~~Potentially significant impacts to the movement of any native resident or migratory fish or wildlife species would be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-8.

Operation

Impacts to the San Gabriel River, its levees, or any other watercourses, would not occur following completion of ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities and infrastructure and utility modifications

associated with the proposed program. In the event some minor improvements are required to be conducted and will interfere with aquatic wildlife movement, implementation of Mitigation Measure BIO-8 would reduce impacts to a less-than-significant level.

Mitigation Measure

Mitigation Measure BIO-8.

Significance after Mitigation

Less than Significant with Mitigation

Impact BIO-5: The proposed program would result in a significant impact if the proposed program would have a substantial adverse effect and conflict with biological resources protected by local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Construction

Protected Trees

Potential impacts to street trees protected by the City of Seal Beach's Protective Tree Ordinance and the City of Long Beach's Tree Maintenance Policy could include tree removal or trimming. Tree removal would result in a permanent impact, while trimming would be considered a temporary encroachment. A permit from the City of Seal Beach Department of Public Works or City of Long Beach Department of Public Works would be required prior to the removal or trimming of any street trees. In accordance with the City of Seal Beach's Protective Tree Ordinance and the City of Long Beach's Tree Maintenance Policy, trees that are removed must be replaced either within an approved 15-gallon tree or within an approved, minimum 24-inch box tree, respectively. Replacement trees shall be planted at a minimum 1:1 ratio (tree planted:tree impacted) and shall be located in an area appropriate for their prolonged growth.

ESHA

Pursuant to CCA Section 30240 of the CCA, impacts to ESHA are generally limited to activities such as habitat restoration as noted by the Coastal Commission Staff Report (GLA 2017d). Moreover, the CCA establishes a high standard for protection of areas that are identified as environmentally sensitive. Only resource-dependent uses, such as habitat restoration, are allowed within an ESHA. Implementation of Mitigation Measures BIO-1 through BIO-10 would ensure that impacts to existing EHSA are temporary and minimized, as well as less than significant.

Potential ESHA occur throughout the South, Isthmus, Central and North Areas based on the suitability to provide habitat for special-status species and/or the presence of a CDFW Sensitive Natural Community. Areas within the restoration program area would qualify as ESHA wherever habitat supports special-status species or where sensitive natural communities exist. Therefore, if additional special-status species are found during subsequent surveys, these areas would also qualify as being potential ESHA.

Ground disturbing activities associated with ecosystem restoration activities, flood risk and stormwater management, development of public access and visitor facilities, and infrastructure and utility modifications would temporarily impact ESHA. These impacts, needed to implement the habitat restoration, can be allowed pursuant to Section 30240 and Section 30233(a)(b) of the CCA. Following completion of grading and restoration efforts, the overall ESHA would be expanded primarily due to the conversion of non-ESHA to ESHA. This would include the conversion of abandoned oil facilities to natural communities. With the successful implementation of the restoration program, most of the program area may qualify for designation as ESHA.

Operation

Tree Protection

No impacts to city-protected trees are anticipated to occur during the operation phase of the proposed program (i.e., post-restoration). Should street tree removal or trimming be required, it will be conducted in accordance with the City of Seal Beach's Protective Tree Ordinance and the City of Long Beach's Tree Maintenance Policy. If applicable within the restoration program area, the California Coastal Commission Special Condition 1. Tree Trimming and Tree Removal Policy for coastal development permit 5-08-187 approved in 2009 would take precedence over the City of Long Beach's Tree Maintenance Policy provisions. Therefore, impacts to protected trees would be less than significant.

ESHA

Potential ESHA occur throughout the South, Isthmus, Central, and North Areas. Impacts during the operation of the proposed program (i.e., post-restoration) may occur during vegetation maintenance, irrigation, non-native plant removal, trash removal and maintenance of levees, berms, flood walls and water-control structures. However, these impacts would be negligible, and as described in the construction analysis above, the nature of the proposed program would expand the amount of ESHA within the program area over time. Any negligible impacts that occur by foot traffic from maintenance personnel, are permitted in accordance with Section 30240 and Section 30233(a)(b) of the CCA. Therefore, impacts to ESHA during the operational phase of the program area would be less than significant.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

Impact BIO-6: Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Based on a review of the California Department of Fish and Wildlife California Regional Conservation Plans, there are no Habitat Conservation Plans or other approved habitat conservation plans prepared for the program area (CDFW 2017b). Given that the program area is not subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan, no impacts would occur.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

No Impact

3.3.6 Cumulative Impacts

3.3.6.1 Construction

The project that may contribute to a cumulative impact in the study area is the Los Cerritos Wetlands Oil Consolidation and Restoration Project (Cumulative Project No. 24), which occurs in portions of the Central and North Areas and contains sensitive biological resources. Other future projects in the cumulative study area are primarily located within urban, developed areas that are generally disturbed and do not support sensitive biological resources, although some of these projects may occur adjacent to open space areas that support sensitive biological resources, including the Seal Beach Residential Project (Cumulative Project No. 3), which occurs approximately 0.25 miles from the southwestern most portion of the program area in an undeveloped area surrounded by residential development. In addition, the Haynes Generating Station Intake Channel Infill Project (Cumulative Project No. 22) is located adjacent to the program area and may result in impacts to aquatic resources, including essential fish habitat.

The Los Cerritos Wetlands Oil Consolidation and Restoration Project is proposed in portions of the Central and North Areas and could result in significant impacts to special-status wildlife and plant species, riparian areas and sensitive natural communities, federally protected wetlands, and wildlife movement and nursery sites. However, construction-related impacts to sensitive biological resources associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project would primarily be temporary, such as 0.462 acres of permanent impacts and 1.12 acres of temporary impacts to waters of the U.S/state within the North and Central Areas. Impacts associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project would be mitigated to a less-than-significant level through the implementation of Mitigation Measures BIO-1 through BIO-11 described in its EIR which avoid, minimize or mitigate for impacts to sensitive biological resources such as special-status plants and wildlife and waters of the U.S. to name a few. Similar to the proposed program, the Los Cerritos Wetlands Oil Consolidation and

Restoration Project would restore, enhance, and create estuarine and associated habitats as well as provide long-term benefits for Belding's savannah sparrow and other special-status species which occur in the overlapping portions of the Central and North Areas. The Los Cerritos Wetlands Oil Consolidation and Restoration Project is the only known restoration project within the assessment area of cumulative impacts and as such will have an overall benefit to biological resources and impacts during construction would not be cumulatively considerable (Table 3-1). The majority of the proposed program's impacts to sensitive biological resources would be temporary, and permanent impacts have largely been avoided by design or are very limited in extent. Therefore, the proposed program's contribution to cumulative impacts during construction would not be cumulatively considerable.

The Seal Beach Residential Project is proposed on a large, vacant lot that could result in significant impacts to special-status wildlife species such as burrowing owl; therefore, development of this parcel could result in significant impacts to protected biological resources. The Haynes Generating Station Intake Channel Infill Project is proposed on primarily aquatic habitat partially within the South Area that could result in significant impacts to special-status aquatic species such as the Pacific green sea turtle and California least tern; therefore, the development of the project could result in significant impacts to biological resources. The construction-related impacts associated with restoration activities within the program area would be short-term, as the majority of area would be temporary impacts and will be largely avoided or enhanced by design and are very limited in extent. Therefore, cumulative impacts to biological resources during construction would not be cumulatively considerable.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.3.6.2 Operation

Upon completion of the proposed program and any nearby cumulative projects, including the Los Cerritos Wetlands Oil Consolidation and Restoration Project, the Seal Beach Residential Project, and the Haynes Generating Station Intake Channel Infill Project, the project would be required to comply with federal and state regulations, as well as applicable municipal codes, pertaining to the protection of biological resources. The Seal Beach Residential Project is not anticipated to have additional impacts to sensitive biological resources during its operation as undeveloped lands where sensitive biological resources could potentially occur would be developed during construction and replaced with residential uses. The Haynes Generating Station Intake Channel Infill Project is not anticipated to have additional impacts to sensitive biological resources during its operation as aquatic resources where sensitive biological resources could potentially occur would be filled in during construction. Therefore, the cumulative impacts to biological resources during operations of both the Seal Beach Residential Project and the Haynes Generating Station Intake Channel Infill Project would not be cumulatively considerable. Further, in conjunction

with the Los Cerritos Wetlands Oil Consolidation and Restoration Project the proposed program would have an overall net beneficial effect upon coastal wetlands and other sensitive biological resources as efforts to restore, enhance, and create estuarine and associated habitats will continue during operation. Mitigation Measures BIO-1, BIO-6, and BIO-8 through BIO-11 will continue to be implemented during operation to avoid, minimize and mitigate for impacts to sensitive biological resources. Therefore, the cumulative impacts to biological resources during operations would not be cumulatively considerable.

Mitigation Measure

No mitigation is required.

Significance after Mitigation

Less than Significant

3.3.7 References

Baldwin, Bruce G., et al. (eds.). 2012. *The Jepson Manual, Vascular Plants of California*. University of California Press, p. 1471.

California Department of Fish and Game, Environmental Services Division (CDFG ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements Sections 1600-1607, California Fish and Game Code. Sacramento, California. January.

California Department of Fish and Wildlife (CDFW). 2017a. Metadata Description of CNDDB Fields. https://map.dfg.ca.gov/rarefind/view/RF_FieldDescriptions.htm#STATE_RANK, accessed May 31, 2017.

———. 2017b. California Regional Conservation Plans. https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=68626&inline, October 2017, accessed February 6, 2019.

———. 2018a. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. October 2018. https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities#natural%20communities%20lists, accessed February 2019.

———.2018b. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities*, March 20.

———. 2019. Wildlife Habitat and Data Analysis Branch, California Natural Diversity Database, data request for Long Beach, Los Alamitos, Newport Beach and Seal Beach 7.5-minute USGS topographic quadrangles. Access date July 26, 2019.

California Department of Fish and Wildlife, Natural Diversity Database (CNDDB). 2018. Special Animals List. Periodic publication. 67 pp. November.

———. 2019a. California Sensitive Natural Communities.

———. 2019b. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 140 pp., March.

California Native Plant Society (CNPS), Rare Plant Program. 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 26 July 2019].

California Restoration Consultants. 2019. Supplemental Biological Surveys and Mapping for the Los Cerritos Wetlands.

City of Long Beach. 2017. Approved Street Tree List 2012. http://www.longbeach.gov/pw/services/street-trees/, accessed June 1, 2017.

Cooper, D.S. and R.A. Hamilton. 2015. A Conservation Vision for the Los Cerritos Wetlands, Los Angeles County/Orange County, California, prepared for Audubon California. October 27, 2015.

Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

Glenn Lukos Associates Inc. (GLA). 2017a. *Biological Technical Report for the Los Cerritos Wetlands Oil Consolidation and Restoration Project*, June 22.

———. 2017b. *Jurisdictional Delineation for the Los Cerritos Wetlands Oil Consolidation and Restoration Project*, June 22.

———. 2017c. *Restoration Plan for the Upper Los Cerritos Wetlands Mitigation Bank*, March 1.

———. 2017d. *Technical Memorandum—Impacts to Areas that Potentially Meet the California Coastal Act Definition for Environmentally Sensitive Habitat Areas (ESHA) Associated with the Los Cerritos Wetlands Oil Consolidation and Restoration Project, Long Beach, California*, May 3, 2017, revised June 22, 2017.

———. 2017e. *Technical Memorandum—Belding's Savannah Sparrow Surveys for 76.5-Acre Proposed Mitigation Bank at Synergy Oil Field, Long Beach, California*, June 7.

Google Earth Pro, 2019.

Moffatt & Nichol (M&N). 2017. *Los Cerritos Wetlands Restoration and Oil Consolidation Project, Beach Oil Minerals Partners, Updated Sea Level Rise Impact Analyses*. Prepared for Glenn Lukos Associates, June.

Placeworks and VCS Environmental. 2016. *Biological Resources Assessment and Wetland Delineation: Southeast Area Development and Improvement Plan*. Prepared for the City of Long Beach.

Sawyer, John O., Todd Keeler-Wolf, and Julie Evens. 2009. *A Manual of California Vegetation, Second Edition*. California Native Plant Society.

Tidal Influence. 2012. *Los Cerritos Wetlands Habitat Assessment Report: Habitat Types and Special Status Species*.

United States Army Corps of Engineers (USACE). 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Ed. J.S. Wakeley, R.W. Lichevar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center and Engineering Laboratory.

USACE and United States Environmental Protection Agency (USEPA). 2015. "Clean Water Rule: Definition of 'Waters of the United States'." Final Rule. Federal Register, 80 FR 37053.

United States Fish and Wildlife Service (USFWS). 2010. Pacific Pocket Mouse (*Perognathus longimembris pacificus*) 5-Year Review: Summary and Evaluation.