3.3 BIOLOGICAL RESOURCES

This section describes the biological resources that occur or have the potential to occur on the CSULB main campus and the Beachside Village property and evaluates the potential impacts that could occur with implementation of the Master Plan Update on those resources. This section identifies common vegetation and habitat types within the CSULB campus, any sensitive plant communities and special-status plant and animal species that may occur, as well as regulatory requirements pertaining to those resources. The analysis describes potential direct and indirect impacts from implementation of the Master Plan Update and identifies mitigation measures for those impacts determined to be significant.

As discussed further in Section 3.3.3, Methodology, the CEQA Guidelines Appendix G checklist questions related to biological resources (i.e., riparian habitat, local policies protecting biological resources, and conflict with an approved habitat conservation plan) were found to have no impact or a less than significant impact in the Initial Study prepared for the Master Plan Update, and thus, are not discussed in detail in this EIR.

Comments from the California Department of Fish and Wildlife (CDFW) related to biological resources were received during the public scoping period in response to the NOP. These comments address the project's potential impacts on jurisdictional waters and sensitive wildlife species, including nesting birds and roosting bats. For a complete list of public comments received during the public scoping period, refer to Appendix A.

3.3.1 Regulatory Setting

Federal

Federal Endangered Species Act

Enacted in 1973, the federal Endangered Species Act (FESA)[1] provides for the conservation of threatened and endangered species and their ecosystems. Consultation with the U.S. Fish and Wildlife Service (USFWS) or the National Oceanic and Atmospheric Administration's National Marine Fisheries Service (NMFS) is required when it is likely that a project could affect species that are federally listed as threatened or endangered. The purpose of the FESA is to conserve the habitats that listed species depend on so that they can recover such that protection under the FESA is no longer needed.

Section 9 of the FESA prohibits the "take" of threatened and endangered species except under certain circumstances and only with authorization from USFWS through a permit under Section 4(d), 7 or 10(a) of the FESA. "Take" under the FESA is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." USFWS has also interpreted the definition of "harm" to include significant impacts to habitat that could result in take. If implementing a project would result in take of a federally listed species, either the project applicant must acquire an incidental take permit under Section 10(a) of the FESA, or if a federal discretionary action is involved, the federal agency must consult with USFWS under Section 7 of the act.

Migratory Bird Treaty Act

Congress passed the Migratory Bird Treaty Act (MBTA)[2] in 1918 to prohibit the kill or transport of

[1] U.S. Code, Title 16, Chapter 35, Sections 1531-1544.
[2] U.S. Code, Title 16, Chapter 7, Subchapter II, Sections 703-712.

native migratory birds, or any part, nest, or egg of any such bird unless allowed by another regulation adopted in accordance with the MBTA. Under the MBTA, it is unlawful to pursue, take, or kill any migratory bird, or any part, nest, or egg of any such bird. “Take” is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities.” Take does not include habitat destruction or alteration, as long as there is not a direct take of birds, nests, eggs, or parts thereof. The current list of species protected by the MBTA includes approximately 1,000 bird species native to the United States. No permit is issued under the MBTA for take; measures that would avoid or minimize impacts on protected migratory birds would need to be employed during project implementation to avoid take if such impacts are identified.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (the Eagle Act) amended in 1962, was originally implemented for the protection of bald eagles. In 1962, Congress amended the Eagle Act to also cover golden eagles, a move that was partially an attempt to strengthen protection of bald eagles, since the latter were often killed by people mistaking them for golden eagles. This act makes it illegal to import, export, take (which includes molest or disturb), sell, purchase, or barter any bald eagle or golden eagle or part thereof.

Clean Water Act

Section 404 of the Clean Water Act (CWA) requires a project applicant to obtain a permit before engaging in any activity that involves a discharge of dredged or fill material into waters of the United States, including wetlands. Fill material includes any material placed in waters of the United States that replaces any portion of waters of the United States with dry land or changes the bottom elevation of any portion of waters of the United States. Waters of the United States include navigable waters; interstate waters; all other waters where the use, degradation, or destruction of the waters could affect interstate or foreign commerce; relatively permanent tributaries to any of these waters; and wetlands adjacent to these waters. Wetlands are defined as those areas that are inundated or saturated by surface water 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. Potentially jurisdictional wetlands typically must meet three wetland delineation criteria: hydrophytic vegetation, hydric soil types, and wetland hydrology. Wetlands that meet the delineation criteria may be jurisdictional under Section 404 of the CWA, pending verification by U.S. Army Corps of Engineers.

Under Section 401 of the CWA, an applicant for a Section 404 permit must obtain a certificate from the appropriate state agency stating that the intended dredge/fill activity is consistent with the state’s water quality standards and criteria. The authority to grant water quality certification is delegated by the State Water Resources Control Board (SWRCB) to the nine regional water quality control boards.

State

California Endangered Species Act

The California Endangered Species Act (Fish and Game Code [CFGC] Sections 2050-2115) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, and includes the California Endangered Species Act (CESA). Additionally, the CFGC regulates impacts to wetlands and waters of the State and sets forth Lake and Streambed Alteration Agreement regulations in Sections 1600 et seq.

Wildlife “take” is defined by CDFW as “to hunt, pursue, catch, capture, or kill, or attempt to hunt,

pursue, catch, capture, or kill." Protection extends to the animals, dead or alive, and all their body parts. Section 2081 of CESA allows CDFW to issue an incidental take permit for state-listed threatened or endangered species, should the project have the potential to "take" a state-listed species that has been detected within or adjacent to the main campus or Beachside Village property. Certain criteria are required under CESA prior to the issuance of such a permit, including the requirement that impacts of the take are minimized and fully mitigated.

All birds except European starlings, English house sparrows, rock doves (pigeons), and non-migratory game birds such as quail, pheasant, and grouse are protected under the MBTA. However, non-migratory game birds are protected under CFGC Section 3503. Many other bird species are considered by CDFW to be California Species of Special Concern (SSC)[3, 4] and CDFW, and others are on a CDFW Watch List (WL).[5] The CNDDB tracks species within California for which there is conservation concern, including many that are not formally listed, and assigns them a CNDDB Rank. Although CDFW SSC and WL species and species that are tracked by the CNDDB but not formally listed are afforded no official legal status, they may receive special consideration during the environmental review process.

CDFW further classifies some species under the following categories: "Fully Protected", "Protected birds" (CDFW Code §3511), "Protected mammals" (CDFW Code §4700), "Protected amphibian" (CDFW Code §5050 and Chapter 5, §41), "Protected reptile" (CDFW Code §5050 and Chapter 5, §42), and "Protected fish" (CDFW Code §5515). The designation "Protected" indicates that a species may not be taken or possessed except under special permit from CDFW; "Fully Protected" indicates that a species can be taken for scientific purposes by permit only.[6] CDFW Code §3503, 3505, and 3800 prohibit the take, destruction, or possession of any bird, nest, or egg of any bird except English house sparrows and European starlings unless express authorization is obtained from CDFW.

Porter-Cologne Water Quality Control Plan

Under Section 13000 et seq., of the Porter-Cologne Water Quality Control Act (Porter-Cologne), the local Regional Water Quality Control Board is the agency that regulates discharges of waste and fill material within any region that could affect a water of the State (California Water Code Section 13260[a]), (including wetlands and isolated waters) as defined by California Water Code Section 13050(e).

California State University

California State University, Long Beach Standard Temporary Construction Controls

CSULB outlines standard specifications for construction contractors to minimize potential impacts during construction activities at the CSULB campus. Standard temporary construction controls applicable to biological resources include tree and vegetation protection, dust control, and erosion control, which could involve but may not be limited to the following:

- Tree and Vegetation Protection:
    - Protect existing trees and other vegetation indicated to remain in place against the

[3] California Department of Fish and Wildlife, Point Blue Conservation Science, and Western Field Ornithologists, 1978, *Bird Species of Special Concern in California: an Annotated List of Declining or Vulnerable Bird Species*.
[4] California Department of Fish and Wildlife and Williams, D. F., 1986, *Mammalian Species of Special Concern in California*, Wildlife Management Division Administrative Report 86-1, 112 pp.
[5] California Department of Fish and Wildlife, July 2022, *Special Animals List*.
[6] Ibid.

following:

- Storage of parking of automobiles or other vehicles.
- Stockpiling of building materials, refuse, or excavated materials.
- Use of tress as support posts, power posts, sign posts, anchorage for ropes, guy wires, or power lines, or other similar functions.
- Dumping of deleterious materials, such as paint, petroleum products, or other similar materials, on or around plant roots, trunks, branches, or foliage.
- Damage by skinning or bruising of bark on trunks or branches, caused by maneuvering vehicles or stacking material or equipment too close to the plant.
- Compaction of soil within the dripline of plants due to movement of trucks or grading machines, pedestrian or vehicular traffic, storage of equipment or materials.
- Excessive water or heat from equipment or utility line construction under or near vegetation to remain.
- Damage to root systems from flooding, erosion, and excessive wetting and drying resulting from watering and other operations.

- Prior to commencement of construction activities, the construction contractor shall erect and maintain a temporary fenced barricade around the dripline of individual trees, around the perimeter dripline of groups of trees, or around other vegetation to remain
- The construction contractor shall supply water in adequate amounts and rates of application as required to maintain the health of protected plant material throughout the duration of construction activities.
- Where excavation for new construction is required within the dripline of trees, hand clearing shall be used to excavate to minimize damage to root systems. Damage minimization techniques include the use of narrow-tine spading forks, combing soil to expose roots, and cleanly cutting roots as close to the excavated area as possible.
- Protect root system of existing trees and vegetation from damage due to chemically injurious materials in solution caused by runoff or spillage during mixing or placement of construction materials, and drainage of stored materials.

<u>California State University, Long Beach Landscape Master Plan</u>

The CSULB Landscape Master Plan identifies important aspects of the landscaping elements on the CSULB main campus and provides recommendations on how to preserve and enhance the campus environment through landscaping.[7] The existing landscape elements on the main campus comprise over 150 acres. The goal of the CSULB Landscape Master Plan is to bring together all part of the main campus through the following initiatives:

- Add site specific and drought tolerant plants to the campus plant palette;

[7] California State University, Long Beach, September 2012, *Landscape Master Plan*.

- Improve and enhance pedestrian promenades within parking areas to facilitate a safe campus;
- Provide a central campus open space and pedestrian axis;
- Strengthen campus identity within the Long Beach community;
- Improve pedestrian circulation;
- Imrpove bicyle circulation and infrastructure;
- Implemente sustainable approaches to water usage, stormwater filtration, and improving the urban forest;
- Provide for a stronger continuity of open spaces throughout the campus; and
- Improve the overall quality of the campus experience.

3.3.2 Environmental Setting

The CSULB main campus encompasses 322 acres and is primarily surrounded by low-density residential neighborhoods to the north, east, south, and west. Medium-density residential and commercial uses are located near the northwestern, northeastern, and southeastern corners of the main campus, with the Veteran's Administration Medical Center complex located adjacent to the southwestern campus boundary. A restrictive covenant prohibiting development was established in 2021 on a large portion of the undeveloped land near the northwest border of the CSULB main campus, and it is held in reserve for the future establishment of a permanent conservation easement for its perpetual protection and management (Restricted Parcel), identified as the National Register-listed *Puvunga Indian Villages Sites Archaeological District* on Figure 3.3-1 below. Site elevations on the main campus generally range between approximately 10 and 80 feet above mean sea level.

The Beachside Village property is located approximately 0.6 miles west of the main CSULB campus and is surrounded by multi-family residential uses to the west and northwest, commercial uses to the north, east, and southeast, and California State Route 1 (i.e., Pacific Coast Highway) to the south and southwest. Site elevations within the Beachside Village property generally range between approximately 20 and 30 feet above mean sea level.

Vegetation Communities and Plant Species

No natural vegetation communities occur within the main campus or at the Beachside Village property. Vegetation within the main campus and Beachside Village property consist of non-native ornamental tree, shrub, and ground cover species, with only a handful of native tree species observed. Grassland habitat with a scattering of trees cover the undeveloped land in the far western section of the main campus. Open space areas within the main campus and Beachside Village property that have little or no hardscape features, such as courtyards and large areas of open grass, are landscaped and maintained for formal athletic purposes, or as recreational and student gathering areas.

An inventory of trees that occur on campus has been conducted by CSULB, which identified 183 unique species and nearly 7,500 individual trees on the main campus and the Beachside Village property.[8] Common tree species, mature trees, any large stands of trees, and general observations on vegetation occurring within each main campus district and the Beachside Village

[8] California State University, Long Beach, Benefits of Trees, available at: https://benefits-of-trees-csu-long-beach-csulb.hub.arcgis.com/, accessed June 5, 2022.

property during the field survey are detailed below. The presence and species of mature trees, those generally 50 or more feet in height, was noted to evaluate the potential for such trees occurring within the main campus and Beachside Village property to provide potentially suitable nesting habitat for raptors.

South District

The South District comprises the campus core and is the densest area of buildings, roadways, and sidewalks (refer to Figure 2-6 in Chapter 2, Project Description). Buildings in this district surround a large traditional college quadrangle. Mature trees, generally ranging between 40 and 80 feet in height are common around the quadrangle, including various fig tree species (*Ficus spp.*), Chinese elm (*Ulmus parvifolia*), Canary Island pine (*Pinus canariensis*), Brazilian pepper (*Schinus terebinthifolius*), Peruvian peppertree (*S. molle*), jacaranda (*Jacaranda mimosifolia*), and southern magnolia (*Magnolia grandiflora*). Additional species of mature trees in the South District include lemonscented gum (*Corymbia citriodora*), red ironbark (*Eucalyptus sideroxylon*), white ironbark (*E. leucoxylon*), Holly oak (*Quercus ilex*), King palm (*Archontophoenix cunninghamiana*), and Italian stone pine (*Pinus pinea*). Two native tree species were observed: coast live oak (*Quercus agrifolia*) and California sycamore (*Platanus racemose*).

Smaller trees, generally ranging between 10 and 30 feet in height, occupy landscaped spaces between buildings, line roadways and sidewalks. Commonly observed species include peach (*Prunus persica*), privet (*Ligustrum spp*.), and camphor (*Cinnamomum camphora*), together with other non-native species.

Figs are the most prominent tree species throughout the South District. Mature specimens of Hill's weeping fig (*Ficus macrocarpa hillii*), green Indian laurel fig (*F. macrocarpa nitida*), and rustyleaf fig (*F. rubiginosa*) trees occur in the quadrangle and are found lining walkways throughout this district. Additionally, two dense stands of green Indian laurel fig are located just south of the McIntosh Humanities Building. These stands are each about 0.30-acre in area and consist of rows of figs regularly spaced apart, generally 50 feet in height and forming a dense canopy cover.

Central District

The Central District includes a variety of existing facilities and is the most densely populated part of the campus (refer to Figure 2-7 in Chapter 2, Project Description). This district serves as a link between the core campus in the South District and campus housing, athletics, and recreation in the North District. Fewer trees are present and hardscape (impervious) features such as parking lots, roadways, and sidewalks occupy much of this district. Variously sized Chinese elm trees are the most common tree species, lining parking lots and walkways. In addition to some of the same tree species identified in the South District, mature Aleppo pine (*Pinus halepensis*), spotted gum (*Corymbia maculate*), coral tree (*Erythrina caffra*), and mulberry (*Morus alba*) trees are present in this district.

East District

The East District includes academic programs, campus facilities and maintenance services, and the student recreation and wellness center (refer to Figure 2-8 in Chapter 2, Project Description). Mature trees are less common in this district and Chinese elm trees are most prevalent. Mature tree species in this district include Manna gum (*Eucalyptus viminalis*) and sugar gum (*E. cladocalyx*). Mature red ironbark trees form a dense line along a walkway separating this district and athletic fields in the North District. Smaller trees commonly lining parking lots and adjacent to buildings in this district include fern pine (*Podocarpus gracilior*), blue paloverde (*Parkinsonia florida*), and Chinese flame tree (*Koelreuteria bipinnata*), although a number of other non-native

species were also observed.

North District

The North District includes athletic venues and the performing arts center (refer to Figure 2-9 in Chapter 2, Project Description). A large section of this district is composed of turf athletic fields, with ornamental trees and shrubs concentrated around buildings and parking lots. Peach, sweet gum (*Liquidambar styraciflua*), London plane (*Platanus x acerifolia*), and California pepper (*Schinus molle*) trees are common in this district. Tall mature trees are less common than in other districts; however, specimens of mature red ironbark, lemon-scented gum, red gum eucalyptus (*Eucalyptus camaldulensis*), and Canary island pine were observed.

West District

The West District includes a majority of the student residence halls, dining facilities, and two primary vehicular entrances and student parking facilities (refer to Figure 2-10 in Chapter 2, Project Description). Mature red ironbark, lemon-scented gum, Canary island pine, Aleppo pine (*Pinus halepnsis*), and Indian laurel fig *(Ficus microcarpa nitida*) trees were observed in parking lots and within campus housing and dining areas. Chinese elm, jacaranda, red bottlebrush (*Callistemon citrinus*), and carrotwood (*Cupaniopsis anacardioides*) trees are common.

Beachside Village Property

The Beachside Village property is located approximately 0.6 miles west of the main campus. Most of the approximately 5-acre property is developed with student residential buildings, parking lots, and internal roadways, with a small number of ornamental trees including Mature Mexican fan palm (*Washingtonia robusta*), blue gum eucalyptus (*Eucalyptus globulus*), and shamel ash (*Fraxinus uhdei*).

Wildlife

Bird Species

A field survey was conducted on March 31, 2022, within the nesting bird season, which generally extends from February 15 through September 15, and as early as January 1 for some raptors. Thirty-three (33) bird species were detected during the field survey. Bird species observed included year-round resident species of California as well as migrating species that arrive in southern California during spring migration periods. The species detected are common in the urbanized environments within which the main campus and Beachside Village property are located. Common species detected include Anna's hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), common yellowthroat (*Geothlypis trichas*), house finch (*Haemorhous mexicanus*), dark-eyed junco (*Junco hyemalis*), bushtit (*Psaltriparus minimus*), black phoebe (*Sayornis nigricans*), yellow-rumped warbler (*Setophaga coronate*), lesser goldfinch (*Spinus psaltria*), house wren (*Troglodytes aedon*), and mourning dove (*Zenaida macroura*). One raptor species, red-tailed hawk (*Buteo jamaicensis*), was observed flying over the main campus during the field survey. Trees and shrubs within the main campus and Beachside Village property provide suitable nesting habitat for bird species. Additionally, mature trees potentially suitable for nesting raptors are common across the main campus, although the most prominent individual or clusters of mature trees that may provide more suitable raptor nesting habitat occur in the South and West Districts. No active or inactive nests, including any large stick nests in mature trees that could indicate the presence of a raptor nest, were observed during the field survey.

Mammal Species

One mammal species, the non-native fox squirrel (*Sciurus niger*) was observed during the field survey. Other mammals such as coyote, racoon, skunk, rabbit, opossum, and ground squirrels could also be expected within the main campus and Beachside Village property. Additionally, buildings and other structures, and trees with cavities, crevices, exfoliating bark, or bark fissures, such as the eucalyptus and palm trees occurring within the main campus and Beachside Village property, may provide potentially suitable roosting habitat for individual and small groups of bat species. However, no indications of the presence of bat roosting were observed during the field survey, such as droppings (guano), urine staining, scratching, or food remnants.

Amphibians, Reptiles, and Fish

No amphibian, reptile, or fish species were observed during the field survey. Reptiles such as western fence lizard (*Sceloporus occidentalis*) and side-blotched lizard (*Uta stansburiana* elegans) likely occur within the main campus and Beachside Village property. Habitat suitable to support amphibian and fish species is absent from the main campus and Beachside Village property and such species are not anticipated. Bouton Creek, which transects the main campus, consists of a concrete box channel. It is generally unsuitable for amphibian species and does not convey suitable discharge to support fish species.

No indications of wildlife utilizing the main campus or Beachside Village property as a wildlife nursing site were detected during the literature review and field survey. Additionally, the urban setting surrounding the campus does not support significant wildlife breeding, colonial nesting, or nursing habitat.

Special-Status and Sensitive Biological Resources

The main campus and Beachside Village property are located in the southwest portion of the U.S. Geological Survey's Los Alamitos, California 7.5-minute quadrangle. The study area for special-status plant and wildlife species search includes the Los Alamitos quadrangle and the surrounding seven quadrangles of South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach and Newport Beach.

Special-Status Plant Species

Special-status plant species include those listed as Endangered, Threatened, Rare or those species proposed for listing by the USFWS under the FESA, those listed by CDFW under the CESA, and the California Native Plant Society (CNPS).[9,10,11] The CNPS inventory is sanctioned by the CDFW and serves as the list of candidate plant species for state listing. CNPS's California Rare Plant Ranks (CRPR) 1B and 2 species are considered eligible for state listing as endangered or threatened.

A total of 42 special-status plant species were identified to have historically been recorded in the Los Alamitos and surrounding seven quadrangles based on searches of the California Natural

[9] Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (Title 50 Code of Federal Regulations [CFR] 17.12 [listed plants], Title 50 CFR 17.11 [listed animals] and includes notices in the Federal Register for proposed species).

[10] Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (Title 14 California Code of Regulations 670.5).

[11] Plants listed as rare under the California Native Plant Protection Act (California Fish and Game Code Section 1900 *et seq*.).

Diversity Database (CNDDB),[12] CNPS on-line inventory,[13] and USFWS online Information for Planning and Consultation (IPaC) (see Appendix D).[14] Six federal and/or State-listed plant species were identified from the database searches to have historical occurrences in the region, including Ventura Marsh milk-vetch (*Astragalus pycnostachyus* var*. lanosissimus*), salt marsh bird's beak (*Chloropyron maritimum* ssp. *maritimum*), San Diego button-celery (*Eryngium aristulatum* var. *parishii),* Gambel's water cress (*Nasturtium gambelii)*, California Orcutt grass (*Orcuttia californica),* and Lyon's pentachaeta (*Pentachaeta lyonii)*.

No records of any federally- or State-listed plant species were determined to coincide with the main campus or Beachside Village property during the literature review. However, three CNDDB records of plant species with a CRPR designation coincide with the main campus, including:

- A record from 1934 of southern tarplant (*Centromadia parryi* ssp. *australis*), a species with a CRPR of 1B.1 ("1B" denotes plants rare, threatened, or endangered in California and elsewhere; ".1" denotes a species *seriously* threatened in California);
- A record from 1896 of Horn's milk-vetch (*Astragalus hornii* var. *hornii*), a species with a CRPR of 1B.1; and
- A record from 1932 of San Bernardino aster (*Symphyotrichum defotiatum*), a species with a CRPR of 1B.2 (".2" denotes a species *fairly* threatened in California)

These occurrences are assumed extirpated due to development of the main campus since these species were recorded, which has resulted in the complete loss of on-site habitat suitable for these species.

No special-status plant species were observed during the field survey and when compared to the habitats that are preferred by regional special-status plants, habitat potentially suitable to support such species is absent from the main campus and Beachside Village property. As a result, special status- plant species are not expected to occur at either location. Additionally, no USFWS-designated critical habitat for any special-status plant species was identified to coincide with the main campus and Beachside Village property during a query of IPaC (USFWS 2022a).

Special-Status Wildlife Species

Special-status wildlife species include those listed by the USFWS under FESA and by CDFW under CESA. USFWS officially lists species as either threatened, endangered, or as candidates for listing. Additional species receive federal protection under the Bald Eagle Protection Act (e.g., bald eagle, golden eagle) and the MBTA, and state protection under CEQA Section 15380(d).

A total of 54 special-status wildlife species was identified to have historically been recorded from the Los Alamitos and surrounding seven quadrangles based on searches of the CNDDB[15] and

[12] California Department of Fish and Wildlife, California Natural Diversity Database, Full report for Los Alamitos, South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach and Newport Beach quadrangles, available at: https://wildlife.ca.gov/Data/CNDDB, generated April 20, 2022.

[13] California Native Plant Society, Inventory of Rare and Endangered Plants, available at: http://www.rareplants.cnps.org/, accessed April 18, 2022.

[14] U.S. Fish and Wildlife Service, Information for Planning and Conservation, available at: https://ecos.fws.gov/ipac/, accessed April 18, 2022.

[15] California Department of Fish and Wildlife, California Natural Diversity Database, Full report for Los Alamitos, South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach and Newport Beach quadrangles, available at: https://wildlife.ca.gov/Data/CNDDB, generated April 20, 2022.

IPaC (see Appendix D).[16] Of the 54 identified species, 19 federally- and/or State-listed wildlife species or candidates for federal or State listing were identified from the database search to have historical occurrences in the region, including:

- San Diego fairy shrimp (*Branchinecta sandiegonensis*)
- monarch-California overwintering population (*Danaus plexippus* pop.1)
- quino checkerspot butterfly (*Euphydryas editha quino*)
- Riverside fairy shrimp (*Streptocephalus woottoni*)
- green turtle (*Chelonia mydas*)
- steelhead-southern California DPS (*Oncorhynchus mykiss irideus pop. 10*)
- tricolored blackbird (*Agelaius tricolor*)
- Swainson's hawk (*Buteo swainsoni*)
- western snowy plover (*Charadrius nivosus nivosus*)
- western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
- southwestern willow flycatcher (*Empidonax traillii extimus*)
- California black rail (*Laterallus jamaicensis coturniculus*)
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*)
- coastal California gnatcatcher (*Polioptila californica californica*)
- light-footed Ridgway's rail (*Rallus obsoletus levipes*)
- bank swallow (*Riparia riparia*)
- California least tern (*Sternula antillarum browni*)
- least Bell's vireo (*Vireo bellii pusillus*)
- Pacific pocket mouse (*Perognathus longimembris pacificus*)

California brown pelican (*Pelecanus occidentalis californicus*), which has been de-listed from both FESA and CESA but remains Fully Protected under California law, was also identified during the database search.

No records of any federally- or State-listed wildlife species were determined to coincide with the main campus or Beachside Village property during the literature review. However, one CNDDB record of unknown date of western tidal-flat beetle (*Habroscelimorpha gabbii*) (tracked by the CNDDB), which is a non-listed special-status wildlife species, coincides with the main campus. This occurrence is assumed extirpated due to development and ongoing disturbance across the main campus, which have resulted in the complete loss of on-site habitat suitable for this species. Additionally, no USFWS-designated critical habitat for any special-status wildlife species was identified to coincide with the main campus or Beachside Village property during a query of IPaC.[17]

Although foraging and nesting habitats suitable to support the special-status wildlife species

[16] U.S. Fish and Wildlife Service, Information for Planning and Conservation, available at: https://ecos.fws.gov/ipac/, accessed April 18, 2022.
[17] Ibid.

identified during the literature review are absent from the main campus and Beachside Village property, a few of the regional special-status bird species identified, such as western snowy plover, California least tern, California brown pelican, and osprey (*Pandion haliaetus*; CDFW WL species), are known to occur in coastal habitats two miles south of the main campus. Although unlikely, these species could fly over the main campus as migrating transients; however, they are not expected to nest or forage within the main campus or at the Beachside Village property due to a lack of suitable habitat.

Mature trees within the main campus provide potentially suitable nesting habitat for raptor species, including Cooper's hawk (*Accipter cooperii*; CDFW WL species), a species not identified during the database searches, but known to successfully nest throughout southern California urban environments (Cooper et al. 2020). Smaller trees within the Beachside Village property are less suitable for nesting Cooper's hawk and this species is not expected at this location. Special-status raptor species identified during the database searches (Appendix D), including Swainson's hawk, ferruginous hawk (*Buteo regalis*), white-tailed kite (*Elanus leucurus*), and burrowing owl (*Athene cunicularia*) are not expected to occur within the main campus or Beachside Village property due to a lack of suitable habitat for these species.

Special-status bird species have also been observed during previous surveys conducted for other projects in the area. During nesting bird surveys conducted in 2007 and 2009 in support of an Alamitos Bay Marina rehabilitation project, two miles south of the main campus, non-listed special-status bird species that were not identified during the database searches were observed.[18] The double-crested cormorant (*Phalacrocorax auritus*), great blue heron (*Ardea herodias*), snowy egret (*Egretta thula*), black-crowned night-heron (*Nycticorax nycticorax*), long-billed curlew (*Numenius americanus*), Caspian tern (*Hydroprogne caspia*), Foster's tern (*Sterna forsteri*), and elegant tern (*Thalasseus elegans*) were observed foraging in Alamitos Bay. These species are colonial nesters along the coast and in proximity to bodies of water located further inland; however, only great blue heron was observed nesting in Alamitos Bay. Although tall mature eucalyptus, pine, and other tree species within the main campus provide potentially suitable nesting opportunities for colonial nesters, there was no evidence of large stick nests indicating the potential presence of a nesting colony within the main campus during the field survey. Suitable mature trees for colonial nesting are not present at the Beachside Village property. These species generally nest within close proximity to waters that provide suitable forage. However, the main campus occurs two miles from potentially suitable foraging waters in Alamitos Bay, and Bouton Creek is channelized and does not provide suitable foraging habitat. Therefore, these species are not expected to nest within the main campus or the Beachside Village property, and are only expected to occur in these locations as migrating or foraging transients.

Buildings and other structures and trees with cavities, crevices, exfoliating bark, or bark fissures, such as the eucalyptus trees occurring on the main campus, may provide potentially suitable roosting habitat for individual and small groups of bat species. Special-status bat species known from the region are not anticipated to occur within the main campus or Beachside Village property due to a lack of suitable habitat. However, common bat species may occur, which are protected from take and harassment as non-game mammals under CFGC Section 4150 and California Code of Regulations Title 14, Section 251.1.

Sensitive Natural Communities

Sensitive natural communities are those designated as rare in the region by the CNDDB and,

[18] LSA Associates, October 2009, *Draft Environmental Impact Report, Alamitos Bay Marina Rehabilitation Project – Biological Resources*.

more recently, listed as a sensitive natural vegetation community by CDFW;[19] that support special-status plant or wildlife species (protected habitat); or, as described in the following section, that receive regulatory protection (i.e., Section 404 of the CWA and/or Sections 1600 et seq. of the CFGC). Rare communities are given the highest inventory priority.[20, 21]

Natural Vegetation Communities

Five sensitive natural vegetation communities were identified during a search of the Los Alamitos and surrounding seven quadrangles in the CNDDB, including California Walnut Woodland, Southern Coastal Salt Marsh, Southern Cottonwood Willow Riparian Forest, Southern Dune Scrub, and Southern Foredunes (see Appendix D).[22] None of these communities occur within the main campus or Beachside Village property. Vegetation within the main campus and Beachside Village property consists primarily of non-native ornamental trees, shrubs, and groundcover common in urban environments.

Aquatic Communities

An online review of the USFWS's National Wetlands Inventory (NWI) Mapper was conducted to identify the presence of any aquatic communities present at the main campus or the Beachside Village property. The NWI Mapper identified two aquatic features potentially falling under federal and/or state jurisdiction. These include Bouton Creek, which runs northwest to southeast through the main campus, and a freshwater emergent wetland within the undeveloped land (see Figure 3.3-1).[23] Bouton Creek is an open concrete box channel along the northern perimeter of the undeveloped land, with chain-link fencing lining the channel. The concrete channel was constructed in 1960 by the Los Angeles Flood Control District. Remaining sections of Bouton Creek within the main campus are channelized underground through the West and Central Districts. Bouton Creek flows southeast from the main campus and discharges into Los Cerritos Channel, which flows into Alamitos Bay approximately 2 miles from the main campus. Tidal waters in Alamitos Bay are considered Essential Fish Habitat, a sensitive natural community, namely and fall under the jurisdiction of the National Oceanic and Atmospheric Association's NMFS.[24] However, the segment of Bouton Creek that crosses the main campus no longer represents a riverine environment or supports riparian habitat.

19 California Department of Fish and Game, June 2021, California Sensitive Natural Communities.
20 California Department of Fish and Game and Holland, R., 1986, *Preliminary Descriptions of the Terrestrial Natural Communities of California*, 156 pp.
21 California Department of Fish and Game, September 2010, *List of California Terrestrial Natural Communities Recognized by the Natural Diversity Data Base*.
22 California Department of Fish and Wildlife, California Natural Diversity Database, Full report for Los Alamitos, South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach and Newport Beach quadrangles, available at: https://wildlife.ca.gov/Data/CNDDB, generated April 20, 2022.
23 U.S. Fish and Wildlife Service, National Wetlands Inventory, available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/, generated March 22, 2022.
24 National Oceanic and Atmospheric Association, Essential Fish Habitat Mapper, available at: https://www.habitat.noaa.gov/apps/efhmapper/, generated March 22, 2022.

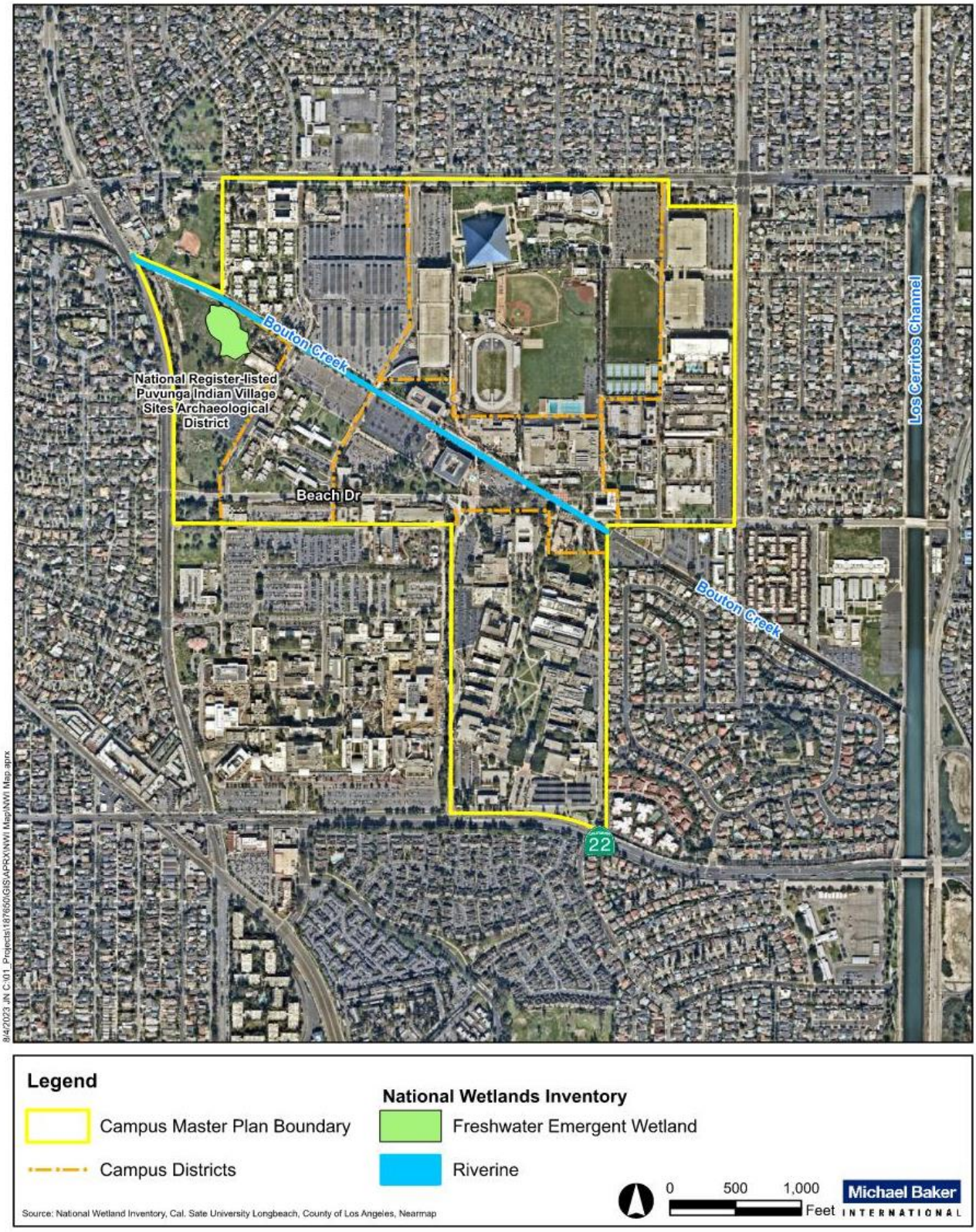

Figure 3.3-1: NWI-Mapped Aquatic Features

No indications of the presence of a freshwater emergent wetland within the undeveloped land were observed during the field survey. Vegetation at this location is similar to the surrounding area in the undeveloped land area, consisting of non-native grasses and other non-native herbaceous vegetation that cover soil piles. Hydrophytic plant species are absent from the location and no indication that standing water is present at any time of the year was observed during the field survey. No other aquatic features were identified within the main campus and Beachside Village property during the field survey.

A review of historical aerial imagery and technical documents was conducted to determine the potential for a wetland to have existed in the undeveloped land at the location indicated in the NWI. Historical imagery provided by Environmental Data Resources[25] was reviewed and indicates:

- From 1928 to 1952, the area where the NWI-mapped wetland is indicated appears primarily as row crop agriculture, with no indication of a wetland present.
- By 1963, no indications of row cropping are visible. The area appears unused and other vegetation has overgrown the agricultural field.
- During the 1970s, the area continues to appear unused, as the CSULB campus starts to be developed towards the undeveloped land from the east. There is no distinct pattern of vegetation and the area generally appears disturbed, potentially being used as informal staging areas for campus construction.
- In 1981, ponds for the Japanese Garden are excavated and work on the garden appears in progress. The area coinciding with the NWI-mapped wetland appears partially disturbed by work at the Japanese Garden.
- By 1989, the Japanese Garden appears finished and the area appears to remain disturbed by work at the Japanese Garden during previous years.
- In 1994, a distinct vegetation/apparently elevated terrain pattern largely coinciding with the NWI-mapped wetland is visible and it is clear that maintenance mowing is conducted immediately around but not across the area.

A review of other sources (noted below) confirms that the entire area has undergone disturbance since roughly the 1940s from informal staging of equipment and materials and disposal of construction materials and spoils during construction activities in the vicinity of the undeveloped land. This includes:

- Use by the Navy for construction equipment storage and refuse disposal along the eastern perimeter of the undeveloped land and near the present-day Japanese Garden during construction of the Veteran's Administration property to the south in the early 1940s, prior to CSULB acquisition of the campus, during World War II.[26]
- Use of the northern portion of the undeveloped land as an active dump in 1978.[27]

[25] Environmental Data Resources, EDR Aerial Photo Decade Package for California State University, Long Beach 22-Acre Site, Includes aerials dated 1928, 1938, 1947, 1952, 1963, 1972, 1977, 1989, 1994, 2002, 2005, 2009, 2012, and 2016, prepared May 8, 2020.

[26] Scientific Resource Surveys, Inc., December 1980, *Archaeological Test Report on the Japanese Garden Arboretum/Museum Site Located on the Campus of the California State University, Long Beach (LA-00263)*, 45 pp.

[27] Scientific Resource Surveys, Inc., Novembr 1978, *Archaeological/Paleontological Survey Report on the Proposed Arboretum Japanese Garden Project Located at California State University, Long Beach*, 13 pp.

- Use of the undeveloped land by CSULB over the years for informal staging, construction spoils disposal, and green waste disposal, including (likely) during construction of the Pyramid, and the on-site parking lot (G2), located south of the Japanese Garden.[28]

Although a history of site disturbance is evident from this review of historical aerials and archaeological reports prepared for the Japanese Garden, other historical sources do note the presence of saturated areas associated with Bouton Creek in the northern portion of the undeveloped land.[29] Bryant Ranch, which occupied the northern portion of the site until it was sold to CSULB, was reportedly plagued by flooding that affected farming activities on-site.[30] During seasons of high rainfall, the area around the creek was reportedly a swamp that attracted a prolific population of ducks that were regularly hunted until the 1940s.[31]

If a wetland previously existed where indicated by the NWI-mapped, review of historic aerials and archival research indicates that it has not been a wetland for many decades. Site disturbance over time from agricultural land uses in the early decades of the 1900s, channelization of Bouton Creek, informal use of the undeveloped land by the Navy and then CSULB for staging, and construction of the Japanese Garden have obliterated any indication of wetlands on-site, if they ever existed.

The NWI indicates that wetlands in the Long Beach area were mapped in the mid-1970s by photo-interpretation, although it is not confirmed that this particular wetland was mapped and included in the NWI at that time. It seems likely that this feature was mapped and included in the NWI on the basis of the distinct spoils-related vegetation/terrain pattern visible in aerial photography in recent decades, which was avoided during regular mowing because of the uneven topography. It is apparent from the field survey, literature search, and university-provided information that spoils have long been placed in the area and avoided by mowing. The spoils may have been interpreted at the time of NWI mapping as a depression, when, in fact, they represent elevated spoils piles. Notwithstanding the NWI map and designation, no wetlands occur within the main campus and Beachside Village property.

Wildlife Movement Corridors

A wildlife movement corridor can be defined as a linear landscape feature of sufficient width and buffer to allow wildlife movement between two comparatively undisturbed habitat fragments, or between a habitat fragment and some vital resource that encourages population growth and diversity. Habitat fragments are isolated patches of habitat separated by otherwise inhospitable areas, such as urban/suburban tracts, agricultural lands, or highways. Habitat fragments can isolate species populations by limiting movement, foraging, and breeding opportunities.

Two types of wildlife movement corridors seen in urban settings are regional corridors, defined as those linking two or more large areas of natural open space; and local corridors, defined as those allowing resident animals to access critical resources (food, cover, and water) in a smaller area that might otherwise be isolated by urban development. Wildlife movement corridors are

[28] California State University, Long Beach, Grounds Department Staff, personal communication, March 30, 2021.

[29] Environmental Data Resources, EDR Aerial Photo Decade Package for California State University, Long Beach, 22-Acre Site, Includes aerials dated 1928, 1938, 1947, 1952, 1963, 1972, 1977, 1989, 1994, 2002, 2005, 2009, 2012, and 2016, Prepared May 8, 2020.

[30] Environmental Data Resources, EDR Aerial Photo Decade Package for California State University, Long Beach, 22-Acre Site, Includes aerials dated 1928, 1938, 1947, 1952, 1963, 1972, 1977, 1989, 1994, 2002, 2005, 2009, 2012, and 2016, Prepared May 8, 2020.

[31] Scientific Resource Surveys, Inc., December 1980, *Archaeological Test Report on the Japanese Garden Arboretum/Museum Site Located on the Campus of the California State University, Long Beach (LA-00263)*, 45 pp.

essential in geographically diverse settings, and especially in urban settings, for the sustainability of healthy and diverse animal communities. At a minimum, corridors promote colonization of habitat and genetic variability by connecting fragments of like habitat and help sustain individual species distributed in and among habitat fragments. They are also important features for dispersal, seasonal migration, foraging, and breeding.

The main campus and Beachside Village property are surrounded by developed residential and commercial properties and established roadways. These areas have limited value or benefit to wildlife movement in the region. Natural vegetation communities located in the Rancho Palos Verdes Natural Community Conservation Plan/Habitat Conservation Plan area approximately 12 miles west of the main campus serve as the nearest habitat that may provide opportunities for significant terrestrial wildlife movement. Golf courses approximately 0.5 miles southwest and 1.5 miles northeast of the main campus provide significant open space areas with mature trees. However, there are no vegetated corridors, perennial surface waters, drainages, or other corridors within or adjacent to the main campus or Beachside Village property that would facilitate wildlife movement to and from these green/open space areas, or other areas that may provide additional opportunities for wildlife cover, resting, foraging, and nesting. Although Bouton Creek transects the main campus, it is a concrete box channel, conveys only periodic discharges, and is flanked by chain link fencing, all of which reduce the potential for the channel to serve as a wildlife movement corridor. Ornamental trees and shrubs within the main campus and Beachside Village property and in the surrounding areas provide opportunities for cover, resting, foraging, and nesting for localized bird populations; however, they do not function as significant wildlife movement corridors.

3.3.3 Methodology

Prior to conducting the field survey, a preliminary review and records search was conducted to determine which special-status biological resources have the potential to occur on or within the general vicinity of the main campus and Beachside Village property. A general field survey was conducted to document existing biological conditions and determine the potential for special status- plant and wildlife species and sensitive habitats to occur within the main campus and Beachside Village property.

Literature Review

Literature reviews and records searches were conducted for special-status biological resources potentially occurring on or within the vicinity of the main campus and Beachside Village property. The main campus and Beachside Village property are located in the southwest portion of the U.S. Geological Survey's Los Alamitos, California 7.5-minute quadrangle. A search of this quadrangle and the surrounding seven quadrangles was conducted in the CDFW CNDDB[32] and the CNPS on-line Inventory of Rare and Endangered Plants of California.[33] Surrounding quadrangles queried include South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach, and Newport Beach. The USFWS IPaC[34] environmental review program and National Wetlands Inventory Mapper[35] were also queried for special-status species, sensitive natural communities, and

[32] California Department of Fish and Wildlife, California Natural Diversity Database, Full report for Los Alamitos, South Gate, Whittier, La Habra, Long Beach, Anaheim, Seal Beach and Newport Beach quadrangles, available at: https://wildlife.ca.gov/Data/CNDDB, generated April 20, 2022.

[33] California Native Plant Society, Inventory of Rare and Endangered Plants, available at: http://www.rareplants.cnps.org/, accessed April 18, 2022.

[34] U.S. Fish and Wildlife Service, Information for Planning and Conservation, available at https://ecos.fws.gov/ipac/, accessed April 18, 2022.

[35] U.S. Fish and Wildlife Service, National Wetlands Inventory, available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/, generated March 22, 2022.

protected areas known in the vicinity of the campus. Results of the CNDDB, CNPS, and IPaC reviews are included as Appendix D.

Field Survey

A field survey was conducted on March 31, 2022, to document the extent and conditions of the biological resources occurring on campus and to assess the potential for special-status species and sensitive communities to occur within the main campus and Beachside Village property. During a review of aerial photography prior to the field survey, it was apparent no natural vegetation communities occur within the main campus and Beachside Village property and habitat potentially suitable for special-status plant and wildlife species is generally absent. As a result, during the field survey, biologists walked meandering transects through all the main campus districts and the Beachside Village property and focused on recording existing vegetation and wildlife and verifying no natural vegetation communities are present. Biologists also remained alert for the presence of any active or old bird nests and suitable bat roosting habitat to evaluate the potential for vegetation within the main campus and Beachside Village property to support bird nesting, bat roosting, or provide breeding or nursing habitat for any other wildlife species.

Thresholds of Significance

The significance thresholds used to evaluate the impacts of the Master Plan Update related to biological resources are based on Appendix G of the CEQA Guidelines. Based on Appendix G, a project would have a significant impact related to biological resources if it 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 Wildlife or U.S. Fish and Wildlife Service;
- 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; or
- 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.

Issues Not Evaluated Further

The Master Plan Update would not result in significant impacts related to the following CEQA Guidelines Appendix G checklist questions, as determined in the Initial Study (Appendix A), and therefore are not evaluated further in this Draft EIR.

- *Would the project 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 Wildlife or U.S. Fish and Wildlife Service?*

  No riparian or sensitive natural community occurs within the boundaries of the CSULB campus.[36] Therefore, no impact to riparian or sensitive natural communities would occur with implementation of the proposed Master Plan Update.

[36] U.S. Fish and Wildlife Service, National Wetlands Inventory, available at: https://fwsprimary.wim.usgs.gov/wetlands/apps/wetlands-mapper/, generated March 22, 2022.

- *Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

  Since CSULB is an entity of the CSU, a state agency, and the main campus and Beachside Village are state-owned property, development on the main campus or the Beachside Village property are not subject to local policies or ordinances. Additionally, all development projects on the main campus and the Beachside Village property are required to implement standard temporary construction controls for natural resources protection, including, but not limited to, the protection of existing trees and other vegetation indicated to remain in place near construction activities and would comply with all applicable state and federal regulations governing biological resources, as discussed in Section 3.3.1, Regulatory Setting.[37] Therefore, no impact related to local policies or ordinances protecting biological resources would occur with implementation of the proposed Master Plan Update.

- *Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

  No adopted Habitat Conservation or Natural Community Conservation Plans coincide with the boundaries of the main campus or the Beachside Village property.[38] Therefore, no impact related to such plans would occur with implementation of the proposed Master Plan Update.

3.3.4 Impact Analysis

The impact analysis below is organized into a program-level analysis and a project-level analysis. For the program-level analysis, the Master Plan Update is evaluated as an overall program of development over a multi-year planning horizon for the CSULB campus. For the project level analysis, near- and mid-term development projects that would be implemented under the Master Plan Update are analyzed. The analysis of near- and mid-term projects below is organized to separately address renovation projects, which involve renovation of existing facilities and additions to existing facilities; replacement projects, which involve demolition and replacement of existing facilities in the same physical location; and new projects, which involve construction of new facilities with a new use.

BIO-1 Would the project 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 Wildlife or U.S. Fish and Wildlife Service?

Program-Level Analysis for Master Plan Update

Construction

Special-Status Plant Species

Forty-two special-status plant species were identified in the study area during the literature review (Appendix D). Individual special-status plants typically could be damaged or destroyed from crushing or trampling during project activities, if present. No federal or State-listed plant species have been identified within the main campus or Beachside Village property and historical records

[37] The California State University, PolicyStat, Section XI: Project Plan Development for Major Capital Construction Projects, Section 9235, Construction Document Phase of Project Development, available at: https://calstate.policystat.com/policy/6654819/latest#autoid-83nrq, accessed June 1, 2022.

[38] California Department of Fish and Wildlife, April 2019, Natural Community Conservation Plans.

of non-listed special-status plants (those with a CRPR designation) previously known from the main campus are assumed extirpated due to regular disturbances across the main campus since these species were recorded over ninety years ago. As a result, special-status plant species are not expected to occur on the main campus or Beachside Village property or surrounding areas. Thus, construction activities associated with the development of renovation, replacement, and new projects under the Master Plan Update would not have the potential to directly affect special status- plant species. No direct impacts on special-status plants would occur with implementation of the proposed Master Plan Update.

Suitable habitat for special-status plants is not present in the urban environment surrounding either the main campus or Beachside Village property and is not anticipated to occur. As a result, construction activities associated with the development of renovation, replacement, and new projects under the Master Plan Update would not have the potential to result in indirect impacts to special-status plants are not anticipated. Additionally, with implementation of CSULB temporary construction controls related to fugitive dust and erosion control, and further discussed in Sections 3.2, Air Quality, and 3.7, Hydrology and Water Quality, the potential for indirect impacts would be minimized. As such, no indirect impacts to special-status plants would occur during construction associated with the development of renovation, replacement, and new projects under the Master Plan Update.

Special-Status Wildlife Species

If present, individual special-status wildlife species could be crushed or trampled during construction activities such as vegetation removal and earth disturbances. Additionally, fugitive dust, noise, and vibration during construction activities could cause wildlife to move away or temporarily avoid the construction area.

Fifty-four special-status wildlife species were identified in the study area during the literature review (Appendix D). No federal or State-listed wildlife species have been identified within the main campus or Beachside Village property and potentially suitable habitat for such species is absent from the main campus and Beachside Village property and surrounding areas. Based on the literature search, a number of regional special-status bird species are known to occur in the study area and have been recorded in and around Alamitos Bay, two miles south of the main campus. Due to the previously disturbed nature of the main campus and Beachside Village property and isolation from natural vegetation communities and shoreline habitats that could provide suitable habitat for special-status wildlife species, it is unlikely that any of the special status- wildlife species identified during the literature review would occur within the main campus or Beachside Village property.

However, tall mature trees within the CSULB main campus provide potentially suitable nesting habitat for Cooper’s hawk (CDFW WL species) and other special-status bird species could incidentally occur across the main campus as migrating transients or while traveling between shoreline habitats to the south and west of the main campus. Mature trees potentially suitable for nesting by Cooper’s hawk may need to be removed during construction activities associated with the development of replacement and new projects under the Master Plan Update. In addition, mobility, circulation, and open space projects as well as renovation projects involving the construction of additions to existing buildings could require the removal of vegetation. Removal of mature trees during construction activities could result in significant impacts to special-status bird species. Implementation of the BMPs included in the CSULB Nesting Bird Guidance Document (see Appendix D) related to pre-construction surveys, avoidance buffers around active nests, and construction monitoring as needed, would be required for development under the Master Plan

Update, as outlined in Mitigation Measure BIO-A. With implementation of Mitigation Measure BIO-A, potential direct and indirect impacts to special status- bird species, such as Cooper's hawk, would be less than significant. Interior renovation projects would involve construction activities only in the interior of existing structures and would not include vegetation removal or demolition of structures; therefore, no impacts associated with interior renovation projects would occur.

Vegetation and structures suitable for nesting by common bird species protected under the MBTA and CFGC occur throughout the CSULB main campus and at the Beachside Village property, some of which would be removed or demolished during construction activities associated with the development of replacement and new projects under the Master Plan Update. Mobility, circulation, and open space projects and renovation projects involving the construction of additions to existing buildings could require the removal of vegetation. Removal of vegetation and structures during construction activities could result in significant impacts to bird species protected under the MBTA and CFGC. Mitigation Measure BIO-A would be required for development of mobility, circulation, and open space renovation projects, renovation projects involving building additions, replacement projects, and new projects developed under the Master Plan Update to reduce impacts to bird species. Mitigation Measure BIO-A would adopt the CSULB Nesting Bird Guidance Document, which defines governing regulations and recommended best practices to comply with state and federal regulations protecting nesting birds during construction and development projects on campus. Mitigation Measure BIO-A includes BMPs related to pre-construction surveys, avoidance buffers around active nests, and construction monitoring as needed. With implementation of Mitigation Measure BIO-A, potential direct and indirect impacts to species protected under the MBTA and CFGC would be less than significant. Interior renovation projects would not include vegetation removal or demolition of structures; therefore, no impacts to species protected under the MBTA and CFGC associated with interior renovation projects would occur.

As presented above, bat species are considered non-game mammals and are afforded protection from take and/or harassment under the CFGC and California Code of Regulations. Eucalyptus and palm trees and structures within the main campus and Beachside Village property provide suitable roosting habitat for individual or small groups of common bat species. No indication of bat roosting was detected, and special-status bat species are not anticipated to occur on the CSULB main campus or Beachside Village property. However, the removal of these tree species and structures during construction activities associated with renovation projects involving building additions, replacement projects, and new projects under the Master Plan Update could result in direct impacts to common bat species in the form of take of individual bats and their habitat. Indirect impacts to bat species could also occur primarily as a result of noise and increased human presence, both of which would occur with construction of renovation, replacement, and new projects developed under the Master Plan Update, resulting in disruptions to roosting bats, if present. As a result, direct or indirect impacts to bat species would be considered significant during construction of renovation, replacement, and new projects developed to that implement the Master Plan Update. With implementation of Mitigation Measure BIO-B, which requires pre-construction bat surveys, direct and indirect impacts to roosting bats would be reduced to less than significant. Interior renovation projects would not include vegetation removal or demolition of structures; therefore, no impacts to common bat species associated with interior renovation projects would occur.

Sensitive Natural Vegetation Communities

Sensitive natural vegetation communities include those that provide potentially suitable habitat for special-status plant and wildlife species. No natural communities preferred by such species

occur within the main campus or Beachside Village property. Existing vegetation includes primarily non-native ornamental species; the removal of such vegetation during construction activities would not affect sensitive natural communities. Therefore, no impact to sensitive natural vegetation communities would occur during construction of development projects associated with the Master Plan Update.

Operation

Following the completion of construction activities for individual renovation, replacement, and new projects developed under the Master Plan Update, CSULB would landscape temporarily disturbed areas in accordance with project landscape plans in compliance with the CSULB Landscape Master Plan. These plans would incorporate xeric landscaping practices utilizing native plant species to conserve water and reduce maintenance. New landscaping is not anticipated to provide or create suitable habitat for special status- species, but may provide more natural landscapes suitable to support common wildlife. Additionally, operations under the Master Plan Update and routine maintenance activities, such as removing or trimming trees or other vegetation to maintain ornamental landscapes, would occur within previously disturbed areas where special-status species are not anticipated to occur and that lack suitable habitats preferred by such species. Therefore, no direct or indirect impacts to special status- plant and wildlife species would occur during operation and routine maintenance under the Master Plan Update.

Project-Level Analysis for Near- and Mid-Term Development Projects

Construction

Construction activities associated with the proposed near- and mid-term development projects would result in similar impacts to those described above at the program level for implementation of the Master Plan Update. Special-status plant species are not expected to occur on the CSULB main campus, Beachside Village property, or the surrounding areas. Thus, construction activities associated with the near- and mid-term development projects would not have the potential to directly or indirectly affect special status plant species. Additionally, implementation of CSULB temporary construction controls related to fugitive dust and erosion control, as discussed in Sections 3.2, Air Quality, and 3.7, Hydrology and Water Quality, would further minimize the potential for indirect impacts. Therefore, no impact to special-status plant species would occur during construction of the near- and mid-term projects under the Master Plan Update.

As previously discussed, tall mature trees within the CSULB main campus provide potentially suitable nesting habitat for Cooper's hawk and other special-status bird species. Additionally, eucalyptus and palm trees and structures within the main campus and Beachside Village property provide suitable roosting habitat for individual or small groups of common bat species. Construction activities associated with several of the near- and mid-term development projects would include vegetation trimming and removal, and demolition and replacement of some existing structures. The projects that would involve such activities include replacement projects (Engineering Replacement Building and New Parkside Housing Village), new projects (Faculty and Staff Housing, New 7th St. Community Outreach Facility), and renovation projects that include additions and/or renovations to the exterior of existing facilities (USU Renovation/Addition and Cafeteria Replacement, Hillside College Renovations/Addition, Beachside Housing, Aquatics Center and Pool Renovation, College of the Arts Replacement Building, Jack Rose Track/Commencement Facilities, Walter Pyramid Renovation, Pedestrian/Bike Lane Improvements, Liberal Arts 5 Renovation, Student Health Services Addition, Corporation Yard Renovations, Friendship Walk Stairs Revitalization, Improved Campus Entrance and Gateway, University Music Center Renovation/Addition, and Redefining the Campus Quad). Removal of

vegetation and structures during construction activities for these projects could result in significant impacts to special status bird species such as Cooper's hawk, bird species protected under the MBTA and CFGC, and/or roosting bats. With implementation of Mitigation Measures BIO-A and BIO-B, impacts to special-status bird species and roosting bats would be less than significant during construction of near- and mid-term renovation projects.

The following near- and mid-term projects would require only interior renovations: Lecture Hall 150-151 Renovation, Fine Arts 1/2 Renovation, Fine Arts 4 Renovation, Theatre Arts Renovation, University Theatre Renovation, Microbiology Student Success Center Renovation, Nursing Building Renovation, and Engineering Tech Renovation. These projects would not require vegetation removal or demolition of structures. Additionally, the Baseball Field Conversion to Multi-Use Field, Central Plant Decarbonization, and Relocated Archery Field would not require any vegetation trimming and removal or demolition of structures. Therefore, no impacts to Cooper's hawk, bird species protected under the MBTA and CFGC, or roosting bats would occur with construction of these near- and mid-term projects.

No natural vegetation communities occur within the CSULB main campus or the Beachside Village property. Therefore, no impact to sensitive natural communities would occur during construction of the proposed near- and mid-term development projects.

Operation

Following completion of construction activities for the near- and mid-term development projects, CSULB would landscape temporarily disturbed areas in accordance with landscape plans. These plans would incorporate xeric landscaping practices utilizing native plant species to conserve water and reduce maintenance. New landscaping is not anticipated to provide or create suitable habitat for special-status species, but may provide natural landscapes suitable to support common wildlife. Similar to the activities described under the program level analysis above, operation and routine maintenance of the near- and mid-term development projects would occur within previously disturbed areas where special-status species are not anticipated to occur and that lack suitable habitats preferred by such species. Therefore, no direct or indirect impacts to special-status plant and wildlife species would occur during operation and routine maintenance of the near- and mid-term development projects.

BIO-2 Would the project 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?

Program-Level Analysis for Master Plan Update

Construction

As stated in Section 3.3.2, Sensitive Natural Communities – Aquatic Communities, no aquatic features were identified within the Beachside Village property during the literature search or field survey. two aquatic features potentially falling under federal and/or state jurisdiction were mapped within the main campus per the USFWS NWI Mapper. These include channelized Bouton Creek, which runs northwest to southeast through the main campus, and a freshwater emergent wetland mapped within the undeveloped land. No field indicators reflecting the presence of a freshwater emergent wetland were identified during the field survey of the undeveloped land. Vegetation at this location is similar to that in the surrounding area in the undeveloped land area, consisting of non-native grasses and other non-native herbaceous vegetation that cover soil piles. Hydrophytic plant species are absent from the location and no indication that standing water is present at any time of the year was observed during the field survey. Based on a review of historical aerial

imagery and technical documents, the entire area has undergone disturbance since roughly the 1940s. If a wetland previously existed in the vicinity of the NWI-mapped wetland, the review of historic aerials and archival research indicates that it has not been a wetland for many decades. Site disturbances over time from agricultural land uses in the early decades of the 1900s, channelization of Bouton Creek, informal use of the undeveloped land by the Navy and then CSULB for staging, and construction of the Japanese Garden have obliterated any indication of wetlands on-site, if they ever existed. Moreover, a large portion of the undeveloped land has a restrictive covenant prohibiting development (Restricted Parcel) and is held in reserve for the future establishment of a permanent conservation easement for its perpetual protection and management, including where the freshwater emergent wetland is mapped, thus avoiding impacts to any potential state or federally protected wetlands. Therefore, no impact would occur to the National Wetlands Inventory Mapper mapped freshwater emergent wetland with construction activities associated with projects developed under the Master Plan Update.

Potential impacts to Bouton Creek are analyzed in the Project-Level Analysis for Near- and Mid-Term Development Projects section below.

Operation

Operation of projects under the Master Plan Update and routine landscape maintenance activities and other maintenance and operational activities, such as mowing, above-ground tree trimming and tree maintenance, aerating turf fields, setting up bleachers on athletic fields, repairing existing irrigation lines, and pest and rodent control activities, would occur within previously disturbed areas where jurisdictional aquatic features are absent. Therefore, no impacts to state or federally protected wetlands would occur during operation and routine maintenance of renovation, replacement, and new projects developed under the Master Plan Update.

Project-Level Analysis for Near- and Mid-Term Development Projects

Construction

As previously discussed, two aquatic features potentially falling under federal and/or state jurisdiction were identified within the main campus per the USFWS NWI Mapper, including channelized Bouton Creek, which runs northwest to southeast through the main campus, and a freshwater emergent wetland within the undeveloped land. Except for the proposed Pedestrian/Bike Lane Improvements, none of the other near- or mid-term projects would involve construction activities along or within the Bouton Creek channel. Additionally, as discussed in Chapter 2, Project Description, a restrictive covenant prohibits development on a significant portion of the undeveloped land, including where the freshwater emergent wetland is mapped.

The proposed Pedestrian/Bike Lane Improvements would be implemented to improve pedestrian, bicycle, and vehicular circulation on the main campus, including path widening along and enhanced crossings over Bouton Creek, and a path on the northside of Bouton Creek or a pre-fabricated bridge to help enhance connections between the bicycle facility and the Parkside Housing Village. In conjunction with this project, CSULB would coordinate with the City of Long Beach to clarify design and engineering constraints and other requirements. Activities near and/or over the Bouton Creek channel may result in potentially significant impacts to Bouton Creek and would require regulatory permits. In order to avoid/minimize direct impacts to Bouton Creek, Mitigation Measure BIO-C would be implemented, which would require a qualified regulatory specialist to review and evaluate project plans of proposed improvements over and adjacent to Bouton Creek. If the plans have the potential to result in impacts to the channel requiring permitting pursuant to the CWA, Porter-Cologne, and/or CFGC, CSULB in coordination with the City of Long Beach would consult with the U.S. Army Corps of Engineers, Los Angeles Regional

Water Quality Control Board, and CDFW regarding applicable permits for the improvements. Additionally, Bouton Creek eventually discharges into Alamitos Bay, approximately 2 miles from the CSULB main campus. Tidal waters occurring in Alamitos Bay are considered a sensitive natural community, in the form of Essential Fish Habitat, and fall under the jurisdiction of the National Oceanic and Atmospheric Association's NMFS. Depending on the extent of impacts to the Bouton Creek channel, consultation with NMFS regarding potential impacts to downstream coastal resources may be required simultaneously with coordination with other regulatory agencies. In addition, implementation of CSULB temporary construction controls related to fugitive dust and erosion control, as discussed in Sections 3.2, Air Quality, and 3.7, Hydrology and Water Quality, would minimize the potential for indirect impacts to Bouton Creek. With implementation of Mitigation Measure BIO-C and adherence to any required permit conditions, direct and indirect impacts to Bouton Creek and downstream coastal resources resulting from construction of the proposed Pedestrian/Bike Lane Improvements would be less than significant.

Operation

Similar to the activities described above at the program level analysis for the Master Plan Update, operation and routine maintenance, including landscaping and infrastructure maintenance activities, of the proposed near- and mid-term projects would occur within previously disturbed areas where jurisdictional aquatic features are absent. Therefore, no direct or indirect impacts to state or federally protected wetlands would occur during operation and routine maintenance of the proposed near- and mid-term projects.

Following completion of construction activities for the proposed Pedestrian/Bike Lane Improvements project, operation of the proposed improvements and routine street/trail maintenance would occur within areas that have either been covered under the regulatory permits obtained for the project, if required, or where it has been determined that no regulatory permits are required. No activities would occur in previously undisturbed portions of Bouton Creek. Additionally, operation and routine maintenance of the other proposed near- and mid-term projects would occur within previously disturbed areas where jurisdictional aquatic features are absent. Therefore, no impacts to state or federally protected wetlands would occur during operation and routine maintenance for projects implemented under the Master Plan Update.

BIO-3 Would the project 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?

Program-Level Analysis for Master Plan Update

Construction

As discussed in Section 3.3.2, Environmental Setting, there are no vegetated corridors, perennial surface waters, drainages, or other corridors within the CSULB main campus or Beachside Village property that would facilitate wildlife movement to and from surrounding green/open space areas, or other areas that may provide opportunities for wildlife cover, resting, foraging, and nesting. Additionally, as a concrete box channel that is flanked by chain link fencing, Bouton Creek does not function as a wildlife movement corridor. Thus, construction activities associated with development of projects under the Master Plan Update would not interfere with a migratory wildlife corridor, movement by native or migratory wildlife species, or a native wildlife nursery site, and no impact would occur.

Operation

Operation of projects developed under the Master Plan Update and routine maintenance activities would occur within previously disturbed areas that are not part of a wildlife movement corridor or a wildlife nursery. As a result, no impacts to a migratory wildlife corridor, movement by native or migrating wildlife, or a native wildlife nursery would occur during operation and routine maintenance of projects developed under the Master Plan Update.

Project-Level Analysis for Near- and Mid-Term Development Projects

Construction

Construction activities associated with the near- and mid-term development projects would result in similar impacts to those described above at the program level analysis for the Master Plan Update above. As previously discussed, no wildlife movement corridors are present on the CSULB main campus or the Beachside Village property or in the surrounding area. Therefore, construction of the near- and mid-term development projects would not interfere with a migratory wildlife corridor, movement by native or migratory wildlife species, or a native wildlife nursery site, and no impact would occur.

Operation

Similar to the activities described above at the program level for the Master Plan Update above, operation and routine maintenance of the near- and mid-term development projects would occur within previously disturbed areas that are not considered a wildlife movement corridor. Therefore, no direct or indirect impacts to a migratory wildlife corridor, movement by native or migrating wildlife, or a native wildlife nursery would occur during operation and routine maintenance of the near- and mid-term development projects.

3.3.5 Mitigation Measures

The following mitigation measures would be required to reduce impacts to special-status bird species and roosting bats during construction of the development implemented under the Master Plan Update.

BIO-A Construction activities shall adhere to all applicable BMPs and recommendations outlined in the CSULB Nesting Bird Guidance Document[39] (refer to Appendix D of this EIR), which outlines measures to avoid take of bird species protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGC) during construction activities and maintenance activities conducted by CSULB where tree removal or trimming is proposed. The guidance document provides information on the bird species that may nest in the area, protection under the MBTA and CFGC, and stipulates the following measures to avoiding impacts to nesting birds during the nesting season, generally January 15 through September 15 (as early as January 1 for some raptors):

1. A pre-construction nesting bird survey shall be conducted by a qualified biologist within 3 days (72 hours) prior to the start of construction activities and/or tree removal to determine whether active nests are present within or directly adjacent to the construction zone.

    a) Following completion of the survey, a brief memo report shall be prepared to

[39] AECOM, August 5, 2020, *Nesting Bird Guidance Document for CSULB Projects*.

document the location of all nests found (if any), their status (i.e., eggs or hatchlings present), existing biological conditions of the project area, and the bird species detected during the survey. If an active nest is found, recommendations to avoid and minimize impacts to the nest, such as those presented below, shall be included as appropriate.

b) Surveys shall be conducted by a qualified biologist, defined as a biologist who has at least one year of professional experience conducting nest surveys under a supervising biologist or has formal education in the identification of regional bird species, and is familiar with the life history of regional bird species.

2. A minimum 150-foot no-work buffer shall be established around any active passerine bird nest and a minimum 300-foot no-work buffer shall be established around any active raptor nest. The qualified biologist shall monitor the nest on a weekly basis, and project activities within 150 feet of an active nest of any passerine bird or within 300 feet of an active nest of any raptor shall be postponed until the biologist determines that the nest is no longer active. However, these no-disturbance buffers may be adjusted (including increases or reductions to the buffer) by the qualified biologist on a case-by-case basis taking into consideration the location, type, duration and timing, and severity of work, distance of nest from project activities, surrounding vegetation and line-of-sight between the nest and work areas, and the species' site-specific level of habituation to the disturbance. If the qualified biologist determines nesting activities may fail as a result of project activities, the biologist shall immediately inform the construction manager and all project activities shall cease within the recommended no-disturbance buffer until the biologist determines the adults and young are no longer reliant on the nest site.

3. Avoidance buffers around active nests shall be delineated on-site with bright flagging for easy identification by project staff. The on-site construction supervisor and operator staff shall be notified of the nest and the buffer limits to ensure it is maintained.

4. When recommended nest avoidance buffers are not feasible and construction must occur near or within an established buffer, nests shall receive initial full-time monitoring to ensure that construction activities are not disturbing any nesting activities or active nests. If the biologist determines that the buffer is appropriate, work can continue with regular spot-checks to document the progress of the nest until it is determined that young are no longer dependent on the nest, the nest has been predated, or is deemed no longer active. With the exception of some raptor nests, inactive nests may be dismantled or otherwise destroyed to discourage future nesting in the same location.

BIO-B A pre-construction survey shall be conducted by a qualified bat biologist who has experience with bats/bat surveys to identify trees and/or structures that could provide day and/or night-roosting or maternity roosting sites for bats within 14 days of the start of construction for projects that include tree removal or building demolition.

1. If day-time roosting bats or sign of such bats are detected: a qualified bat biologist should be present to monitor any tree removal and/or building demolition activities and develop project-specific measures to minimize impacts to day-roosting bats. This should include the designation of no-disturbance buffers around day-roosting bats based upon the particular bat species found and/or the phased removal of

buildings and trees to allow day-roosting bats to relocate on their own volition.

2. If an active maternity roost is identified, no work activities should occur within 100 feet of or directly under or adjacent to the maternity roost during the breeding season when young are present but are not yet ready to fly (generally April through August).

BIO-C For projects occurring within or adjacent to Bouton Creek, such as the Pedestrian/Bike Lane Improvements project, CSULB shall engage a qualified regulatory specialist to review and evaluate project plans of proposed road improvements over and adjacent to Bouton Creek. If the plans have the potential to result in impacts to the channel requiring permitting pursuant to the Clean Water Act, Porter-Cologne, and/or CFGC, CSULB in coordination with the City of Long Beach shall consult with the U.S. Army Corps of Engineers, Los Angeles Regional Water Quality Control Board, and California Department of Fish and Wildlife regarding applicable permits for the improvements. Depending on the extent of impacts that may occur to the Bouton Creek channel, consultation with the National Marine Fisheries Service regarding potential impacts to downstream coastal resources may be required and should occur simultaneously in coordination with other regulatory agencies. Any required permit conditions shall be implemented to avoid or minimize impacts to Bouton Creek.

3.3.6 Level of Significance After Mitigation

Implementation of Mitigation Measures BIO-A and BIO-B would ensure that impacts to special status bird species and roosting bats would be less than significant during construction activities. Implementation of Mitigation Measure BIO-C would ensure that impacts to Bouton Creek during construction activities would be less than significant.

3.3.7 Cumulative Impacts

Significant impacts to biological resources resulting from the implementation of the Master Plan Update are not anticipated. Impacts to special-status plant and wildlife species, sensitive vegetation communities, and wildlife movement corridors would not occur, and potential significant impacts to special-status bird species protected under the MBTA and CFGC and bat species protected under the CFGC and California Code of Regulations would be minimized through the implementation of Mitigation Measures BIO-A and BIO-B. Potential significant impacts to Bouton Creek related to proposed pedestrian/bike lane improvements would be minimized through implementation of Mitigation Measure BIO-C, if required, resulting in less than significant impacts to state or federally protected wetlands. As a result, implementation of the Master Plan Update, taking into account related projects, would not contribute to cumulatively significant impacts.