

ATTACHMENT 3

**BIOLOGICAL RESOURCES REPORT:
TALBERT LAKE DIVERSION PROJECT**

BIOLOGICAL RESOURCES REPORT TALBERT LAKE DIVERSION PROJECT

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INTRODUCTION

This report presents the results of biological constraints analyses for the East Garden Grove Wintersburg Channel (EGGWC) project site located in the City of Huntington Beach, Orange County, California (Exhibit 1). The EGGWC project site consists of three proposed diversion structure alternatives located at and just east of Goldenwest Street (Exhibit 2). One alternative will be selected to divert dry weather urban runoff from the EGGWC to the Talbert Lake Diversion Project located in Huntington Beach Central Park (Central Park). In addition, this report provides an updated summary of Central Park's biological resources.

SECTION 1.0 DIVERSION STRUCTURES

The proposed project consists of three diversion structure alternatives for the Talbert Lake Diversion Project. Each alternative has a slightly different location in the EGGWC and all three are located near Goldenwest Street, as shown on Exhibit 2. The proposed staging area for the construction of each alternative will be limited to a parking lot in Murdy Park (see Exhibit 2) so as not to affect the non-native vegetation types on site. Murdy Park consists of turf grass, ornamental vegetation, and developed areas.¹

1.1 SURVEY METHODS

BonTerra Consulting Senior Biologists Brian Daniels and Sandy Leatherman conducted surveys on August 6 and September 21, 2007, in order to document existing biological resources and to evaluate potential constraints at the EGGWC site for the three proposed diversion structures (hereafter referred to as the "project site"). The California Native Plant Society's (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 2007) and the California Department of Fish and Game's (CDFG) California Natural Diversity Database (CNDDDB) (CDFG 2007a) were reviewed to identify special status plants, wildlife, and habitats known to occur in the vicinity of the EGGWC.

All species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names. Nomenclature for vegetation types generally follows that of *Habitat Classification System Natural Resources Geographic Information System (GIS) Project* (Gray & Bramlet 1992).

1.2 SURVEY RESULTS

The EGGWC at the project site consists of a concrete box structure that is located east (upstream) of Goldenwest Street. West (downstream) of Goldenwest Street, the EGGWC becomes riprap with a soft-bottom invert. A chain-link fence exists at the top of the vertical walls of the channel east of Goldenwest Street, but it does not continue west of Goldenwest Street; there are also chain-link fences along the outer edge of the access road at the top of the levee wall on both sides of Goldenwest Street. Sediment has accumulated on the concrete bottom of the channel, so some vegetation is present upstream of Goldenwest Street in addition to the vegetation on the soft-bottom portion of the EGGWC.

¹ The staging area for the project was changed in January 2008 to the paved parking lot adjacent to the City's Landscape and Maintenance Division facility on Gothard Street next to the project site. No biological constraints are anticipated from the use of this paved area.



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Regional Location

Talbert Lake Diversion Project

Exhibit 1





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Location of Diversion Structure Alternatives

Exhibit 2

Talbert Lake Diversion Project



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1.2.1 VEGETATION TYPES AND OTHER AREAS

A total of five vegetation types and other areas were identified within the EGGWC project site and are discussed below. A map (Exhibit 3) is provided that illustrates the distribution of vegetation types on the project site as of the September 21, 2007, survey. Note that the project site is a concrete box structure that serves as a flood-control structure and as such, the vegetation may be removed as part of regular maintenance activities and/or during rainfall events.

Freshwater Marsh

The freshwater marsh vegetation type occurs on the project site where enough sediment has accumulated to support clumps of cattails (*Typha* sp.). Other species are also present that are typical of the freshwater marsh vegetation type, and some weedy species are also present in these areas, including Spanish sunflower (*Pulicaria paludosa*).

Riparian Herb

The riparian herb vegetation type consists of grasses and forbs that are typically associated with mesic (wet) habitats throughout southern California. Typical plant species of this vegetation type located on the project site include white water cress (*Rorippa nasturtium-aquaticum*) and great water speedwell (*Veronica anagallis-aquatica*); these species occur in more mesic areas. Drier locations support more annual species, such as beard grass (*Echinochloa crus-galli*), knotweed (*Polygonum* sp.), and white sweet-clover (*Melilotus alba*).

Ruderal

Ruderal vegetation is non-native or weedy native vegetation that is well adapted to areas of disturbance and high-nitrogen soils. On the project site, these areas occur in the drier parts of the channel. Ruderal species present include the flax-leaved horseweed (*Conyza bonariensis*), common sow-thistle (*Sonchus oleraceus*), and common morning-glory (*Ipomoea purpurea*).

Developed

Developed areas are not a vegetation type but are delineated as a mapping unit on the vegetation map. These areas are man-made structures that contain little to no vegetation. Any vegetation that is present is similar to the ruderal vegetation described above. Developed areas on the project site consist of levee access roads, fences, and other structures built within the right-of-way or adjacent to the project site.

Open Water

Open water is also not a vegetation type but is delineated as a mapping unit on the vegetation map. Open water on the project site consists primarily of fresh water. These areas may contain small amounts of vegetation, depending on recent water levels, the amount of sediment that has accumulated, and whether or not flood-control maintenance activities have recently been performed.

1.2.2 WILDLIFE

The vegetation and water at the project site provides suitable habitat for many wildlife species, especially birds. Developed areas surround the project site, and although Murdy Park is adjacent to the north, the park supports only turf grass and ornamental vegetation; it is separated from the project site by a tall chain-link fence. These developed areas and other

Project Site

Study Area

Vegetation Types and Other Areas

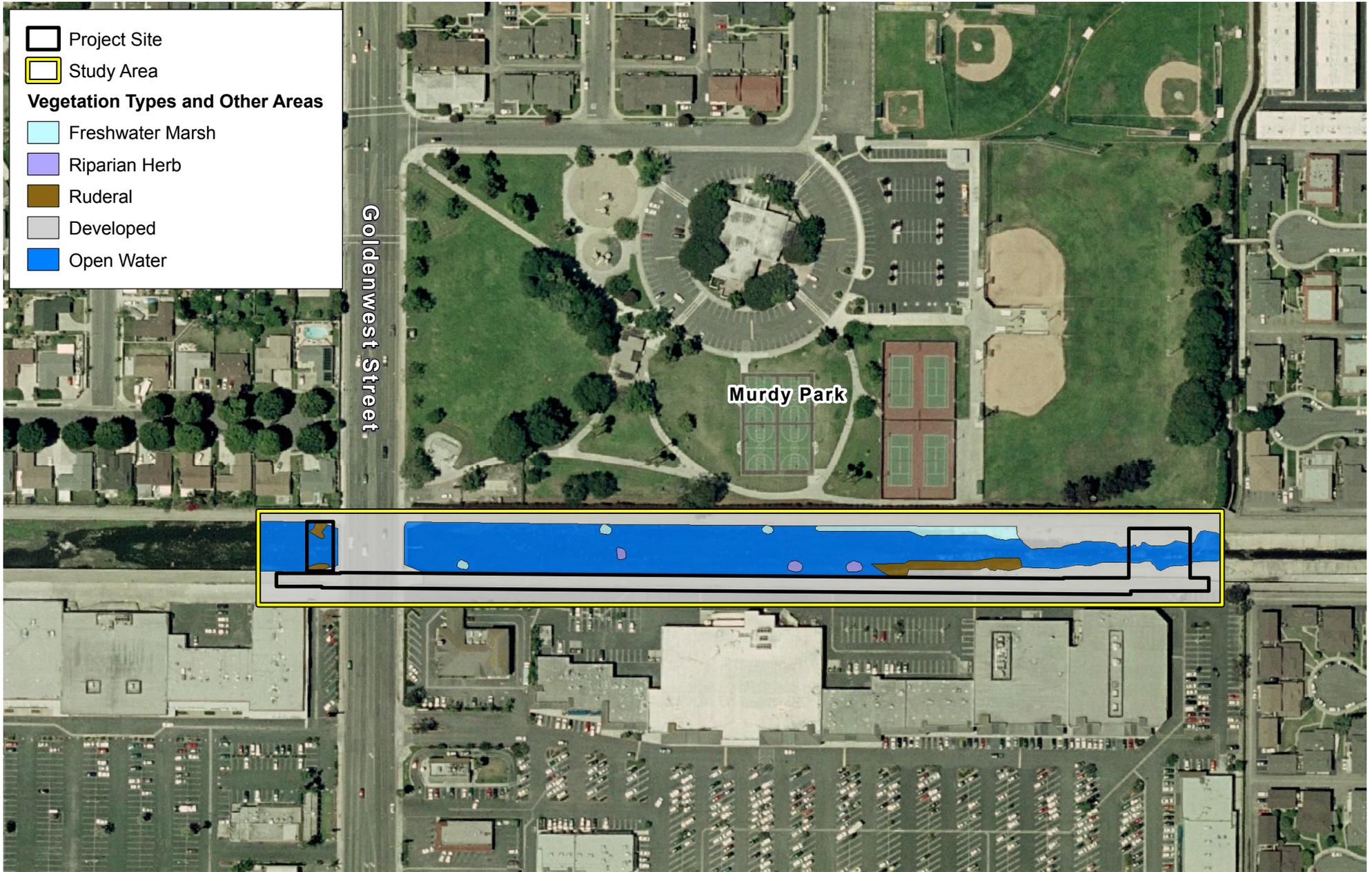
Freshwater Marsh

Riparian Herb

Ruderal

Developed

Open Water



Existing Vegetation, EGGWC at Diversion

Talbert Lake Diversion Project

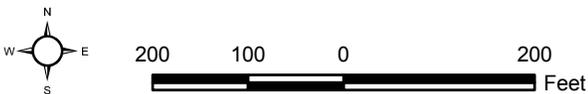


Exhibit 3

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structures (such as chain-link fences) surrounding the project site are constraints to wildlife movement of many species.

During the project site survey, numerous small- and medium-sized fish were observed under the bridge where the water is expected to be primarily fresh water (brackish water is downstream of Goldenwest Street). Fish at this location are expected to consist of fresh water species or species adapted to both brackish and fresh water conditions. The non-native western mosquito fish (*Gambusia affinis*) is expected to be present, as it is widely used to control mosquitoes. Native fish species are expected to occur at this location and should include the California killifish (*Fundulus parvipinnis*). The common carp (*Cyprinus carpio*) was observed in the shallow water upstream of Goldenwest Street. The common carp is a non-native fish species that was introduced into the region and is detrimental to native habitats and wildlife.

No amphibian and only one reptile species were observed during the survey on the project site. In general, the concrete box channel and other developed areas of the project site are not favorable for native amphibian and reptile species. Amphibian species that may occur on the project site include the Pacific treefrog (*Pseudacris regilla*) and western toad (*Bufo boreas*). The red-eared slider (*Chrysemys scripta*) was observed in the channel during the survey. The red-eared slider is a non-native species that has been introduced into the region and is now fairly widespread. As with the common carp, the red-eared slider is detrimental to native habitats and wildlife. An occasional side-blotched lizard (*Uta stansburiana*) and gopher snake (*Pituophis catenifer*) may occur, but the western fence lizard (*Sceloporus occidentalis*) is the only native reptile species expected to occur on the project site.

A variety of water birds can be expected to occur at the project site, especially during migration and the winter season. Although the August 6, 2007, survey was conducted near the end of the breeding season for many species in the region, birds from farther north were already moving south. Species observed using the project site's habitats during the survey included mallard (*Anas platyrhynchos*), great egret (*Ardea alba*), snowy egret (*Egretta thula*), white-faced ibis (*Plegadis chihi*), killdeer (*Charadrius vociferous*), black-necked stilt (*Himantopus mexicanus*), greater yellowlegs (*Tringa melanoleuca*), black phoebe (*Sayornis nigricans*), common yellowthroat (*Geothlypis trichas*), song sparrow (*Melospiza melodia*), and house finch (*Carpodacus mexicanus*). Except for great and snowy egrets, white-faced ibis and greater yellowlegs, these species potentially nest on the project site. The two egret species and the white-faced ibis potentially breed in the area (for example at Bolsa Chica) and use the channel habitats only for foraging. The greater yellowlegs is a species of sandpiper that breeds in Canada and begins returning to the project site region in early July.

No mammals were observed during the survey on the project site. As with the amphibian and reptile species, the concrete box channel and other developed areas on and bordering the project site are not favorable for most mammal species in the region. However, there are several native species that have readily adapted to urban habitats, and the Virginia opossum (*Didelphis virginiana*), black rat (*Rattus rattus*), common raccoon (*Procyon lotor*), and striped skunk (*Mephitis mephitis*) are expected to occur on the project site. The coyote (*Canis latrans*) is resident at Bolsa Chica and surrounding open space habitats and may occasionally wander up the channel onto the project site. Other mammal species expected to occur on the project site include a variety of bats. Bats are expected to use the site primarily for foraging and can occur all year round on an occasional basis. Most of these bats are expected to be migrants, but some, such as the Yuma myotis (*Myotis ymanensis*), potentially breed in the project vicinity.

1.2.3 SPECIAL STATUS BIOLOGICAL RESOURCES

Special status species and vegetation types have been given recognition by federal and/or State agencies and private conservation organizations because of a perceived or documented

decline in the population size or geographic range of the species or its habitat. Certain special status species have been listed as Threatened or Endangered under the State and/or Federal Endangered Species Acts (CESA and FESA, respectively). A special status habitat is one that is known to support numerous plant and wildlife species that are listed as Rare, Threatened, or Endangered by the State and federal resource agencies. In addition, local agencies may have statutes to protect habitats considered locally significant, such as oak trees.

Special Status Plant Species

One special status plant species, southern tarplant (*Centromadia parryi* ssp. *australis*), has limited potential to occur on the project site. The remaining plants that are known to occur in the vicinity of the project site occur in relatively undisturbed native habitats such as saltwater marsh and coastal sage scrub. These species are not expected to occur due to the disturbed nature of the vegetation types within the project site.

The southern tarplant is a CNPS List 1B.1 species. This CNPS status designates List 1B species as those plant species that are Rare or Endangered in California or elsewhere. This species grows in mesic grasslands with an ocean influence and in ruderal areas in Orange County. Under criteria set forth in Section 15380 of the California Environmental Quality Act (CEQA), impacts on this species could require mitigation if the lead agency determines that these impacts are considered significant. Under most circumstances, special status plant surveys would be conducted to determine the absence or presence of List 1B.1 species in order to evaluate any potential impacts. However, the project site is disturbed on a regular basis by flood-control maintenance. Therefore, a substantial population of the southern tarplant is not expected to be present within the project site. Furthermore, the conditions after construction of the proposed project are not expected to be substantially different from the current conditions of the project site.

Wildlife Species

One special status species was observed during the survey. The white-faced ibis is a California Species of Special Concern with respect to rookeries where this species nests. Under CEQA (Section 15380) criteria, impacts on this species could be considered significant and require mitigation. However, the project site only provides foraging habitat and no rookeries are present within the project site or anywhere else in the EGGWC. Therefore, the impacts on foraging habitat for the white-faced ibis would not be considered significant and no mitigation would be required. A variety of other special status species have the potential to occur on the project site. Examples include raptor species such as the Cooper's hawk (*Accipiter cooperii*) and peregrine falcon (*Falco peregrinus*), but the project site does not provide suitable nesting habitat for these species. Therefore, project implementation would not result in any impacts on nesting habitat for these other special status species, and any potential impacts on foraging habitat would not be considered significant.

Habitats

Special status habitats are considered to be "depleted" habitats by the CDFG. These habitats are typically protected by an ordinance, code, or regulation under which conformance typically requires a permit or other discretionary action prior to impacting the habitat. Only one CDFG-listed special status habitat (the freshwater marsh) occurs on the project site. Project implementation would potentially impact the freshwater marsh habitat and mitigation may be required. However, it is expected that this habitat will be addressed through the permitting process discussed below. The city will seek authorization to impact this habitat and to perform other construction-related activities within the channel through CDFG's approval of a Streambed Alteration Agreement, pursuant to Section 1602 of the *Fish and Game Code*.

Jurisdictional Areas

Drainages, which may include wetlands and “Waters of the United States,” are regulated pursuant to Section 404 of the Clean Water Act and are under the jurisdiction of the U.S. Army Corps of Engineers (USACE). In addition, if drainages meet the criteria established by Section 1600 of the CDFG Code, a Streambed Alteration Agreement may be required by CDFG prior to any modification of the bed, bank, or channel of a streambed on the project site. The City intends to seek authorization from the USACE (pursuant to Section 404 of the Clean Water Act) and the CDFG (pursuant to Section 1602 of the *Fish and Game Code*) to address impacts to these State and federal jurisdictional resources.

1.3 CONCLUSION

Although the southern tarplant and several special status wildlife species potentially occur or are known to occur (e.g., white-faced ibis), potential impacts on these species would not be considered significant; therefore, no focused surveys for special status plant or wildlife species are warranted. Prior to implementation of the proposed project, the City will obtain a Section 404 permit from the USACE and a Streambed Alteration Agreement from the CDFG.

SECTION 2.0 DOWNSTREAM TO TIDE GATES

As shown in Exhibit 2, there are three proposed diversion structures that are located at Goldenwest Street and the EGGWC. This constraints analysis is for potential indirect impacts that may occur downstream after implementation of the proposed project at the EGGWC project site.

2.1 SURVEY METHODS

BonTerra Consulting Senior Biologists Brian Daniels and Sandy Leatherman conducted a biological reconnaissance survey on November 1, 2007, in order to evaluate existing biological resources and potential for indirect effects in the EGGWC downstream of the project site. The CNPS’s Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2007) and the CDFG’s California Natural Diversity Database (CDFG 2007a) were reviewed to identify special status plants, wildlife, and habitats known to occur in the vicinity of the EGGWC.

All species observed were recorded in field notes. Plant species were identified in the field or collected for subsequent identification using keys in Hickman (1993) and Munz (1974). Taxonomy follows Hickman (1993) and current scientific data (e.g., scientific journals) for scientific and common names. Nomenclature for vegetation types generally follows that of *Habitat Classification System Natural Resources Geographic Information System (GIS) Project* (Gray and Bramlet 1992).

2.2 SURVEY RESULTS

The EGGWC is a soft-bottom channel with earthen levees protected by riprap; it is located downstream of Goldenwest Street. The downstream terminus of the concrete box channel is about 100 meters west of Goldenwest Street. Water essentially covers all of the soft-bottom invert from the concrete box channel downstream to the tide gates at Bolsa Chica. The tide gates allow water to move to and from Outer Bolsa Bay and, as a result, tidal influence (i.e., salt water) extends upstream from Bolsa Bay to about the downstream terminus of the concrete box channel west of Goldenwest Street. East of Graham Street, developed areas surround the EGGWC, but open spaces about the levees between Graham Street and the tide gates.

2.2.1 VEGETATION TYPES

Vegetation is primarily limited to the levee toes from the tidal gates to the upstream terminus of the soft-bottom channel. However, vegetation is present on the invert in the upper parts of this reach of the EGGWC, especially between Goldenwest and Springdale Streets. Marsh vegetation is present throughout the reach, but is degraded by presence of ruderal (weedy), non-native species and trash.

The salt marsh vegetation type is found from the tide gates upstream to a point approximately 500 meters south (downstream) of Graham Street, near the access bridge. This area is disturbed with many ruderal species also present (as listed below). Characteristic species of salt marsh vegetation present downstream of this access bridge included common woody pickleweed (*Salicornia virginica*), saltgrass (*Distichlis spicata*), alkali heath (*Frankenia salina*), and alkali weed (*Cressa truxillensis*). This vegetation is limited to the levee toes, as the invert of the channel is dominated by open water at high tide. At low tide, some of the invert is exposed and largely unvegetated mud flats appear.

Brackish marsh vegetation dominates in areas where there is moderate salinity. Within the EGGWC, the brackish marsh vegetation type extends from the salt marsh vegetation type upstream to the freshwater marsh vegetation type located in the project site's concrete box channel. The prominence of bulrushes (*Scirpus* sp.) indicates brackish marsh (rather than freshwater marsh or salt marsh) vegetation types. Bulrushes were not observed in the salt marsh or fresh water parts of the EGGWC during this survey.

Ruderal vegetation is intermixed with the salt and brackish marsh species. Ruderal species present include the flax-leaved horseweed, common sow-thistle, five-hooked bassia (*Bassia hysopifolia*), and Russian thistle (*Salsola tragus*).

2.2.2 WILDLIFE

Birds were the only wildlife observed during the survey. About 40 species were recorded during the survey, and included mostly water birds such as ducks. These species included Canada goose (*Branta canadensis*), gadwall (*Anas strepera*), mallard, blue-winged teal (*Anas discors*), cinnamon teal (*Anas cyanoptera*), northern pintail (*Anas acuta*), green-winged teal (*Anas crecca*), lesser scaup (*Aythya affinis*), ruddy duck (*Oxyura jamaicensis*), pied-billed grebe (*Podilymbus podiceps*), eared grebe (*Podiceps nigricollis*), double-crested cormorant (*Phalacrocorax auritus*), and American coot (*Fulica americana*). Other species present that are characteristic of water habitats included great blue heron (*Ardea herodias*), great egret, snowy egret, white-faced ibis, black-necked stilt, spotted sandpiper (*Actitis macularius*), and greater yellowlegs. Land birds observed using habitats within the channel during the survey included Anna's hummingbird (*Calypte anna*), black phoebe, Say's phoebe (*Sayornis saya*), bushtit (*Psaltriparus minimus*), marsh wren (*Cistothorus palustris*), common yellowthroat, savannah sparrow (*Passerculus sandwichensis*), song sparrow, Lincoln's sparrow (*Melospiza lincolni*), white-crowned sparrow (*Zonotrichia leucophrys*), and house finch.

The EGGWC downstream of Graham Street is no longer surrounded by developed areas, but is within the open spaces of the Bolsa Chica wetlands. As a result, the abundance and diversity of wildlife species greatly increases over what is present and potentially present upstream at the EGGWC project site. Native fish are more common in this part of the EGGWC, with many salt-tolerant species (such as California killifish and topsmelt [*Atherinops affinis*]) expected to be present. As most amphibian species are salt intolerant, they are not expected to occur in the EGGWC channel habitats within Bolsa Chica. Reptile species expected to occur at least occasionally on the EGGWC at Bolsa Chica include the western fence lizard, side-blotched lizard, southern alligator lizard (*Elgaria multicarinata*), and gopher snake. Besides the birds

observed during the survey, several shorebird species are expected to occur regularly in the EGGWC when mud flats are exposed at low tide, especially downstream near the tide gates, and include willet (*Tringa semipalmata*), marbled godwit (*Limosa fedoa*), western sandpiper (*Calidris mauri*), least sandpiper (*Calidris minutilla*), dunlin (*Calidris alpina*), and short-billed dowitcher (*Limnodromus griseus*).

2.2.3 SPECIAL STATUS PLANT SPECIES

There are numerous special status plant species known to occur or that potentially occur at the Bolsa Chica Ecological Reserve. Only the southern tarplant, a CNPS List 1B.1 species, has potential to occur in the EGGWC downstream of the project site. Three State and federally Endangered plant species are known to occur within the Bolsa Chica Ecological Reserve: Ventura Marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*); salt marsh bird's-beak (*Cordylanthus maritimus* ssp. *maritimus*); and California Orcutt grass (*Orcuttia californica*). However, none of these species are expected to occur in the EGGWC within the Bolsa Chica Ecological Reserve due to the lack of suitable dune, relatively undisturbed coastal salt marsh, and vernal pool habitat.

2.2.4 SPECIAL STATUS WILDLIFE SPECIES

Numerous special status wildlife species have the potential to occur in the EGGWC within the Bolsa Chica Ecological Reserve. Seven of these species are listed as Threatened and Endangered with the resource agencies: California brown pelican (*Pelecanus occidentalis californicus*), bald eagle (*Haliaeetus leucocephalus*), American peregrine falcon (*Falco peregrinus anatum*), light-footed clapper rail (*Rallus longirostris levipes*), western snowy plover (*Charadrius alexandrinus nivosus*), California least tern (*Sternula antillarum browni*), and Belding's savannah sparrow (*Passerculus sandwichensis beldingi*).

The California brown pelican is a common year round visitor to Bolsa Chica that breeds offshore on the Channel Islands and is most abundant at Bolsa Chica during the fall and winter. It is expected to occur occasionally in the EGGWC for foraging and roosting. The bald eagle is a rare fall and winter visitor to Orange County and there are reports from Bolsa Chica. The EGGWC at Bolsa Chica provides suitable foraging for the bald eagle and it may occur. In recent years, the peregrine falcon has become a regular year-round visitor to Bolsa Chica. Subspecies other than *anatum* may occur at Bolsa Chica. As yet, the peregrine falcon does not nest at Bolsa Chica. The EGGWC provides suitable foraging habitat for the peregrine falcon and it is often seen hunting for its prey (i.e., birds) over the channel within the Bolsa Chica wetlands. Although the light-footed clapper rail has been a rare visitor in recent years, the new tidal habitats being developed for the Bolsa Chica restoration project are expected to provide additional suitable nesting habitats for this species and it may re-establish a breeding population there. The EGGWC does not provide enough salt marsh habitat to support the light-footed clapper rail, but wandering individuals could occur. The western snowy plover breeds at Bolsa Chica and uses many parts of the Reserve for foraging, roosting, and nesting. This species may occasionally occur in the EGGWC (especially during migration and the winter season) for foraging or roosting, but it is not expected to occur for nesting. The California least tern breeds at Bolsa Chica and primarily forages offshore, but is also present in the inner bays including the EGGWC for foraging. This species potentially nests on bare open ground at many locations within Bolsa Chica, but the relatively high human traffic along the EGGWC levee trails precludes a colony from being established there. The Belding's savannah sparrow is a year-round resident that breeds in relatively large numbers at Bolsa Chica. Salt marsh habitats within the EGGWC are not substantial enough to support nesting Belding's savannah sparrows, but it is expected to occur occasionally for foraging.

2.3 CONCLUSION

The proposed construction of a diversion structure in the EGGWC at Goldenwest Street has potential indirect effects on downstream habitats within the EGGWC and the special status plant and wildlife species that occur or potentially occur in those habitats. Except for the southern tarplant, there are no Threatened or Endangered plant species that are expected within the channel because of a lack of suitable habitat (as discussed above). Numerous special status wildlife species (including seven Threatened and Endangered species) are known to occur or have the potential to occur downstream of the project site, especially where the channel passes through the Bolsa Chica Wetlands.

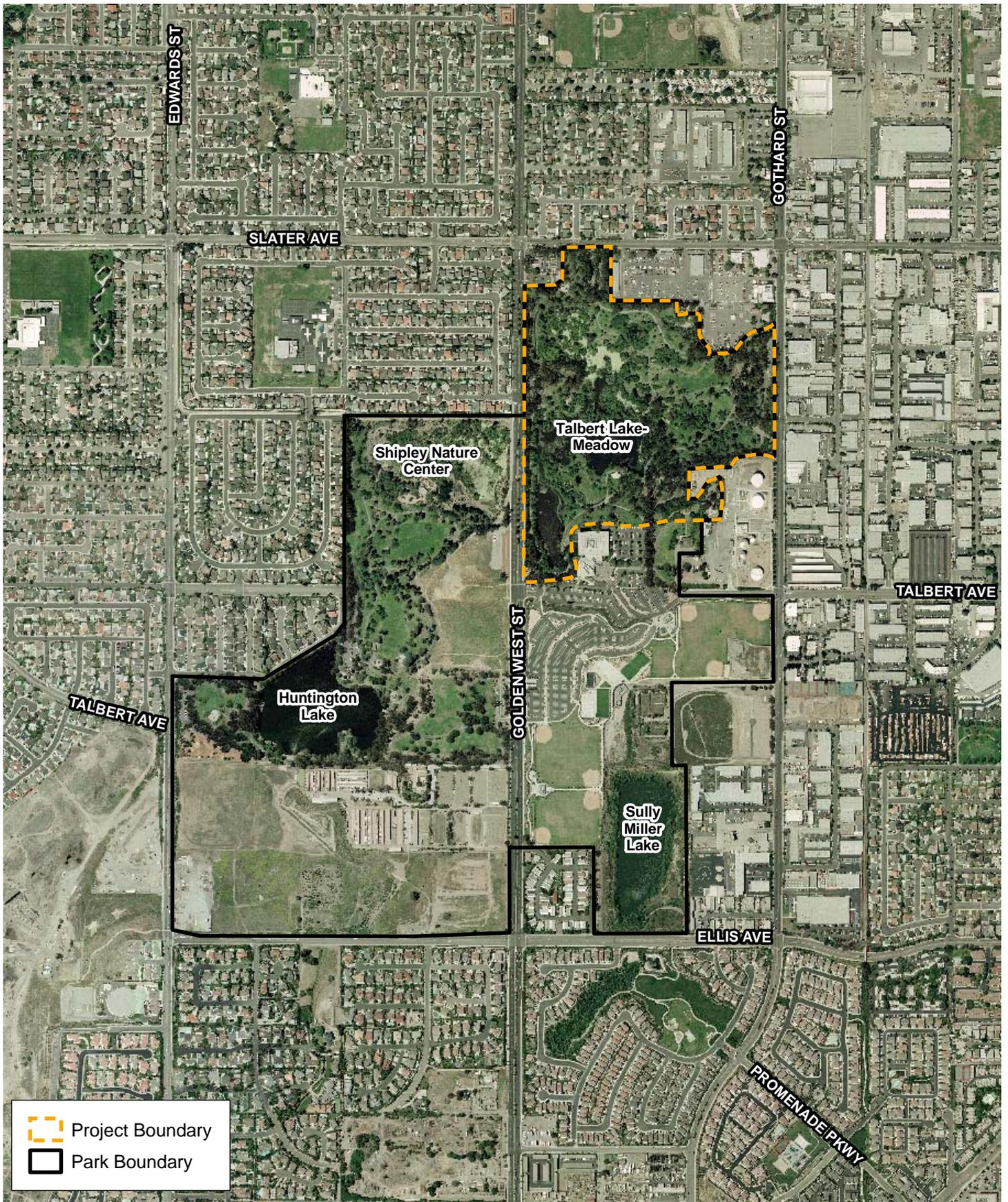
All three diversion structure alternatives would divert dry weather flows to the Talbert Lake Project Site under non-storm conditions. This action would remove fresh water flows from the channel downstream of the project site to Outer Bolsa Bay. As described above, the EGGWC is tidally influenced through tide gates where the channel enters Outer Bolsa Bay; this tidal influence allows salt water to move into the lower reaches of the EGGWC.

Salt marsh vegetation in proximity to water containing the highest salinity, which is found from the tide gates to a point in the channel approximately 500 meters downstream (south) from Graham Street. This vegetation then transitions to brackish marsh vegetation, which dominates the channel upstream to a point downstream of the concrete box channel, about 100 meters west of Goldenwest Street. Freshwater marsh vegetation is present from the concrete box channel to an area upstream to the project site. Since water diversion would only occur during low flow conditions, the amount of fresh water that would not enter the brackish waters downstream of Goldenwest Street would occur during the summer months when it has its lowest pressure or influence on downstream habitats. This water diversion during low flow conditions would not be expected to affect water levels or salinity downstream at the Bolsa Chica wetlands, but it may affect water conditions immediately downstream of the project site. Reduction of fresh water flows during low flow conditions would be expected to increase salinity levels in the channel immediately downstream of the project site. This may allow brackish marsh vegetation to incrementally spread upstream of its current distribution within the EGGWC towards Goldenwest Street; however, overall water levels downstream of the project site are not expected to change due to the dominance of tidal flows in this portion of the EGGWC.

The impacts on downstream habitats that may result from the proposed project are considered minimal and would consist primarily of a potential increase in salinity immediately downstream of the project site. It is expected that this would be an incremental increase in salinity that would be limited to those areas immediately downstream of the project site. These potential changes in salinity would not result in any impacts on the special status plant and wildlife species known to occur or that potentially occur downstream of the project site.

SECTION 3.0 HUNTINGTON CENTRAL PARK

Central Park is located in the City of Huntington Beach, Orange County (Exhibit 4). The official dedication of Central Park as a City Park occurred in 1974. The biological resources of Central Park were described and analyzed in the *Huntington Central Park Master Plan of Recreation Uses* (1999). Supplemental reports for Central Park now include the *Biological Resources Technical Report for the Huntington Beach Senior Center Project* (2007) and BonTerra Consulting's *Results of Focused Surveys for the Southwestern Willow Flycatcher and Least Bell's Vireo on the Talbert Lake Diversion Project Site, City of Huntington Beach, Orange County, California* (2007). The discussion below provides an updated summary of Central Park's biological resources.

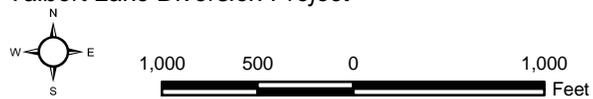


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Local Vicinity

Exhibit 4

Talbert Lake Diversion Project



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3.1 **EXISTING CONDITIONS**

3.1.1 **VEGETATION TYPES**

A variety of ornamental vegetation is found throughout Central Park that consists primarily of non-native species planted for aesthetic purposes. In particular, gum trees (*Eucalyptus* spp.) are common. Native vegetation types are present and generally consist of wetland vegetation types that are located in low areas of the park, which are either permanently or seasonally inundated with water. These native vegetation types include willow riparian scrub, mule fat scrub, and freshwater marsh.

BonTerra Consulting identified five vegetation types (Exhibit 5) for the Talbert Lake Project Site: willow riparian scrub, freshwater marsh, mule fat scrub, ornamental, and “turf grass with scattered ornamental trees (native and non-native).”² Other areas included on the vegetation map are developed areas and open water (not described below). Note that the nomenclature and identification of these vegetation types generally follows that of *Habitat Classification System Natural Resources Geographic Information System (GIS) Project* (Gray and Bramlet 1992). However, “turf grass with scattered ornamental trees (native and non-native)” was designed for this project and could be considered a subunit of the ornamental vegetation type. The Master Plan (Huntington Beach 1999) chose to divide the ornamental vegetation type into “urban forest” and “landscaped” with similar results. Additional vegetation types in Central Park and identified in the Master Plan (Huntington Beach 1999) include ruderal and annual (non-native) grassland (both of these vegetation types can sometimes be considered, depending on their condition, as “bare” or “disturbed” areas). These vegetation types are briefly described below.

Willow Riparian Scrub

The willow riparian scrub vegetation type is found along the margins of permanent water or in areas that are seasonally inundated with water. In Central Park, willow riparian scrub is characterized by the presence of black willow (*Salix gooddingii*), arroyo willow (*Salix lasiolepis*), and mule fat (*Baccharis salicifolia*). Understory species that are associated with this vegetation type at Central Park include mule fat, stinging nettle (*Urtica dioica*), cocklebur (*Xanthium strumarium*), and smartweed (*Polygonum* sp.). Non-native invasive species that are present in this vegetation type at Central Park include castor bean (*Ricinus communis*), passion vine (*Passiflora sprucei*), tamarisk (*Tamarix ramosissima*), and others. The passion vine is especially problematic for this vegetation type as it spreads and grows rapidly, covering willow trees and eventually bringing the trees down by the weight of its vegetative growth.

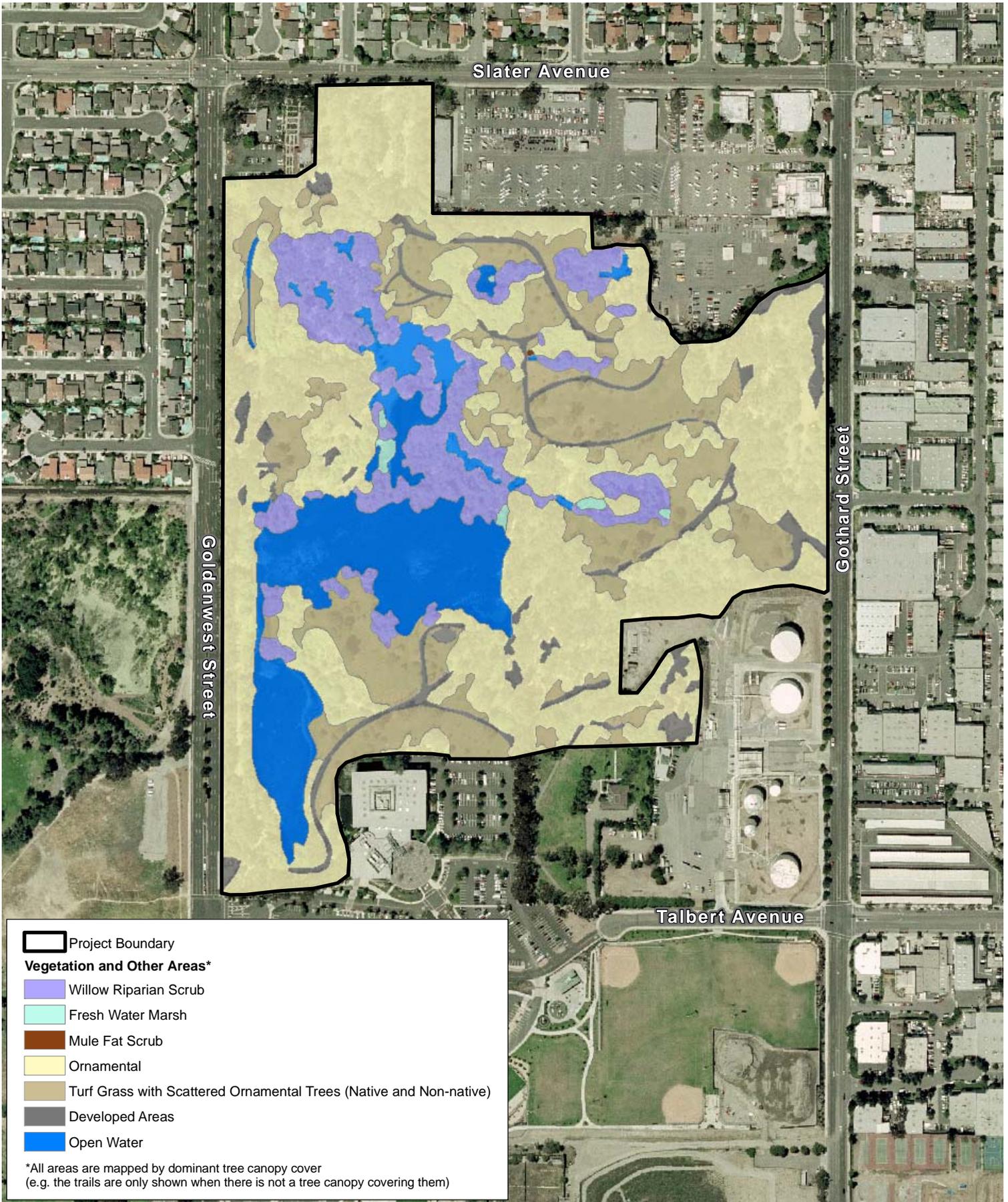
Freshwater Marsh

The freshwater marsh vegetation type is found in Central Park where stands of cattails and/or common tule (*Scirpus* sp.) are dominant. These stands of cattails and tule are present around permanent bodies of water such as Huntington Lake or areas that receive frequent inundation such as the Talbert Lake Meadow area.

Mule Fat Scrub

The dominant plant species of the mule fat scrub vegetation type is mule fat. Mule fat can form dense stands either in wet or relatively dry habitats. In Central Park, it is found around the periphery of permanent bodies of water such as Huntington Lake or in small patches, such as the one currently within the Talbert Lake Meadow area.

² This is a vegetation type that was developed for the MND project for a unique vegetation type.



Project Boundary

Vegetation and Other Areas*

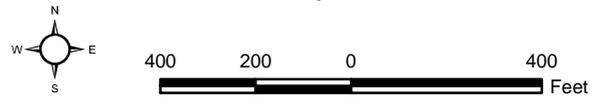
- Willow Riparian Scrub
- Fresh Water Marsh
- Mule Fat Scrub
- Ornamental
- Turf Grass with Scattered Ornamental Trees (Native and Non-native)
- Developed Areas
- Open Water

*All areas are mapped by dominant tree canopy cover (e.g. the trails are only shown when there is not a tree canopy covering them)

Existing Vegetation, Central Park

Talbert Lake Diversion Project

Exhibit 5



Ornamental

Ornamental landscaping typically consists of introduced trees, shrubs, flowers, and turf grass. In Central Park, the ornamental vegetation type includes some native species that have been planted for ornamental purposes: white alder (*Alnus rhombifolia*), sycamore (*Platanus* sp.), and cottonwood (*Populus* sp.). California sycamore (*Platanus racemosa*) is native to the region, but the sycamore trees on the project site appear to be a hybrid between London plane tree (*Platanus acerifolia*) and the California sycamore or another sycamore species. The cottonwood trees may be the native Fremont's cottonwood (*Populus fremontii*), but some appear to be a non-native cottonwood species.

Ruderal

Ruderal vegetation typically consists of non-native weedy species that typically grow following some form of ground disturbance. Grading, mowing, and clearing activities often allow ruderal vegetation to invade and dominate an area. A variety of ruderal species are found in Central Park, including black mustard (*Brassica nigra*) and wild radish (*Raphanus sativus*).

Annual (Non-native) Grassland

Annual (non-native) grasslands are found in several areas of Central Park. Talbert Lake is dominated by this vegetation type in dry conditions. Characteristic species of these grasslands in Central Park include slender wild oat (*Avena barbata*), wild oat (*Avena fatua*), soft chess (*Bromus hordaceus*), and foxtail chess (*Bromus rbens*).

3.1.2 WILDLIFE

Central Park is well known among the bird watching community as a “migrant trap.” That is, its geographic location along the coast and environmental setting (i.e., surrounded by suburban habitats that are relatively unfavorable for birds) create a situation that concentrates birds during migration and, as a result, many rare species have been documented at Central Park. Currently, the bird list for Central Park includes about 310 species. It must be noted that the relative isolation of Central Park from other open space areas reduces the potential occurrence of wildlife species of lesser mobility. In addition, those of limited mobility that occur or have occurred in Central Park are more subject to local extirpation as a result. Connectivity between Central Park and other open spaces (i.e., Bolsa Chica wetlands) is via Harriett Wieder Regional Park (across Edwards Street at Central Park's southeastern corner). This wildlife movement corridor has obstructions such as vehicular traffic and fences that prevent many species of lesser mobility from accessing Central Park.

Fish

There are no naturally occurring fish populations within the park. The non-native western mosquito fish is present at Central Park, as it used by Orange County Vector Control for mosquito abatement. Recreational fishing is permitted in Central Park, and Huntington Lake has been stocked with fish, presumably through controlled releases.

Amphibians

The non-native African clawed frog (*Xenopus laevis*) and bullfrog (*Rana catesbeiana*) are common in Central Park. Both species are detrimental to native amphibian species. Native amphibian species that are expected to still persist in the park include garden slender salamander (*Batrachoseps major*), western toad (*Bufo boreas*), and Pacific treefrog (*Psudacris regilla*).

Reptiles

The western fence lizard is the most common reptile species in Central Park. Other native species still expected to occur include the side-blotched lizard, southern alligator lizard, and gopher snake. Introduced non-native species include the red-eared slider (which is common in Central Park), and the common snapping turtle (*Chelydra serpentina*) has also been observed. Both of these species are detrimental to native wildlife species.

Birds

Although the greatest diversity of birds occurs during spring and fall migrations, there are many interesting species that breed in the park. Several raptor species have nested in Central Park and include: white-tailed kite (*Elanus leucurus*), Cooper's hawk, red-shouldered hawk (*Buteo lineatus*), red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco sparverius*), and great horned owl (*Bubo virginianus*). A relatively long list of land bird species nest in the park, including common ground dove (*Columbina passerina*), downy woodpecker (*Picoides pubescens*), Nuttall's woodpecker (*Picoides nuttallii*), Hutton's vireo (*Vireo huttoni*), common raven (*Corvus corax*), tree swallow (*Tachycineta bicolor*), western bluebird (*Sialia mexicana*), orange-crowned warbler (*Vermivora celata*), yellow warbler (*Dendroica petechia*), great-tailed grackle (*Quiscalus quiscula*), and American goldfinch (*Carduelis tristis*). Rare nesting occurrences for Orange County have occurred at Central Park and include such species as least bittern (*Ixobrychus exilis*), dark-eyed junco (*Junco hyemalis*), and indigo bunting (*Passerina cyanea*).

Mammals

The most common mammal species observed at Central Park include Virginia opossum, desert cottontail (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*). Occasionally observed mammals include the house mouse (*Mus musculus*), broad-footed mole (*Sapanus latimanus*), striped skunk, common raccoon, and coyote. The non-native fox squirrel (*Sciurus niger*) has recently become fairly common in Central Park. Feral cats (*Felis cattus*) are present in the park and are detrimental to native wildlife species.

3.1.3 SPECIAL STATUS PLANT AND WILDLIFE SPECIES

State and federal resource agencies as well as private organizations have afforded certain plant and wildlife species (including subspecies or variety) a special status if it has been documented that an individual taxon has declined or has a limited population size, range, and/or distribution resulting (in most cases) from habitat loss. Sources used to determine the special status of biological resources at Central Park include:

Plants – Electronic Inventory of Rare and Endangered Vascular Plants of California (CNPS 2007); the CNDDDB (CDFG 2007a); various Federal Register notices from the U.S. Fish and Wildlife Service (USFWS) regarding listing status of plant species; and the CDFG's List of Special Plants (CDFG 2007c).

Wildlife – List of Special Animals (CDFG 2007b); CNDDDB (CDFG 2007a); and various Federal Register notices from the USFWS regarding listing status of wildlife species.

The following two tables provide a summary of special status plant (Table 1) and special status wildlife (Table 2) species that occur or have a reasonable potential to occur at Central Park. The CNDDDB search is conducted by United States Geological Survey (USGS) geographic quadrangle maps and often produces long lists of special status plant and wildlife species. Limiting species inclusion by geographic region or habitat requirements can reduce the size of

these lists. However, there is often a need to be all-inclusive in these lists for reasons other than biology. The following tables have a somewhat reduced list and include only those special status species known to occur and those considered to have a “reasonable” chance of occurring at the park. For example, the light-footed clapper rail (an Endangered species) occurs in salt marsh habitats along the coast, including Bolsa Chica Wetlands; although not migratory, there is some limited movement of these birds especially in late summer and fall. Central Park does not provide suitable habitat and if one individual occurred during fall dispersal, it would not be expected to stay.

**TABLE 1
SUMMARY OF SPECIAL STATUS PLANT SPECIES
AT HUNTINGTON (BEACH) CENTRAL PARK**

Common Name	Scientific Name	USFWS	CDFG	CNPS	Occurrence
southern tarplant	<i>Centromadia parryi</i> ssp. <i>australis</i>	—	—	1B.1	Occurs in Bolsa Chica (CDFG 2007a). Suitable habitat for this species occurs in undeveloped areas and ruderal lots.
Coulter's goldfields	<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	—	—	1B.1	Historically occurred in Bolsa Chica (CDFG 2007a). Suitable habitat in the undeveloped areas that contain alkaline soils.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	—	—	1B.2	Record for Wintersburg Channel (CDFG 2007a), the specimen for this plant is mis-identified (Roberts 2007). Suitable habitat for this species in the undisturbed banks of Lakes within the park (i.e., Sully Miller portion of the Park).
San Bernardino aster	<i>Symphotrichum defoliatum</i>	—	—	1B.2	Historically occurred in Bryant Ranch area (CDFG 2007a). Suitable habitat for this species occurs in wet areas adjacent to the undisturbed portions of the Lakes within the park (i.e., Sully Miller portion of the Park).
LEGEND					
California Native Plant Society (CNPS) List Categories					
1A Plants Presumed Extinct in California					
1B Plants Rare, Threatened, or Endangered in California and Elsewhere					
2 Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere					
3 Plants for Which More Information is Needed – A Review List					
4 Plants of Limited Distribution – A Watch List					
California Native Plant Society (CNPS) Threat Code Extensions					
0.1 Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)					
0.2 Fairly endangered in California (20–80 percent occurrences threatened)					
0.3 Not very endangered in California (less than 20 percent of occurrences threatened or no current threats known)					
— Plants lacking any threat information					

**TABLE 2
SUMMARY OF SPECIAL STATUS WILDLIFE SPECIES
AT HUNTINGTON (BEACH) CENTRAL PARK**

Species	Status		Occurrence
	USFWS	CDFG	
Reptiles			
<i>Emys</i> [<i>Clemmys</i>] <i>marmorata pallida</i> southwestern pond turtle	—	SSC	Has been reported but believed, if correct, to involve released individuals; no breeding population extant.
<i>Phrynosoma coronatum</i> [<i>blainvillii</i> population] coast [San Diego] horned lizard	—	SSC	May have occurred previously, but no suitable habitat currently exists. Not expected to occur.
Birds			
<i>Pelecanus occidentalis californicus</i> California brown pelican	FE	SE	Very rare visitor (5 or fewer records); no suitable nesting habitat.
<i>Phalacrocorax auritus</i> double-crested cormorant	—	SSC	Uncommon year-round visitor; potential nesting habitat but no nesting attempted.
<i>Ixobrychus exilis</i> least bittern	—	SSC	Rare spring/summer visitor; very rare nester (five or fewer records).
<i>Plegadis chihi</i> white-faced ibis	—	SSC	Rare year-round visitor; no suitable nesting habitat.
<i>Accipiter cooperii</i> Cooper's hawk	—	SSC	Uncommon year-round resident; nests in park.
<i>Accipiter striatus</i> sharp-shinned hawk	—	SSC	Uncommon migrant and winter visitor; does not breed in region.
<i>Aquila chrysaetos</i> golden eagle	—	FP/SSC	No record, but potential to occur during winter; no suitable nesting habitat.
<i>Buteo regalis</i> ferruginous hawk	—	SSC	Very rare fall/winter visitor (5 or fewer records); does not breed in region.
<i>Buteo swainsoni</i> Swainson's hawk	—	ST	Very rare migrant (5 or fewer records); does not breed in region.
<i>Circus cyaneus</i> northern harrier	—	SSC	Uncommon migrant and winter visitor, rare in summer; potentially suitable nesting habitat.
<i>Elanus leucurus</i> white-tailed kite	—	FP	Uncommon year-round visitor; nests in park.
<i>Falco columbarius</i> merlin	—	SSC	Rare fall and winter visitor; does not breed in region.
<i>Falco mexicanus</i> prairie falcon	—	SSC	Very rare fall and winter visitor (5 or fewer records); no suitable nesting habitat.
<i>Falco peregrinus anatum</i> American peregrine falcon	—	SE, FP	Rare year-round visitor; potentially suitable nesting habitat.
<i>Charadrius alexandrinus nivosus</i> western snowy plover	FT	SSC	No record, but potential to occur as migrant; no suitable nesting or wintering habitat.
<i>Numenius americanus</i> long-billed curlew	—	SSC	Rare migrant and winter visitor; does not breed in region.
<i>Chlidonias nigeri</i> black tern	—	SSC	Very rare migrant (5 or fewer records); does not breed in region.
<i>Larus atricilla</i> laughing gull	—	SSC	Very rare visitor (5 or fewer records); does not breed in region.
<i>Larus californicus</i> California gull	—	SSC	Common winter visitor; does not breed in region.
<i>Rynchops niger</i> black skimmer	—	SSC	Uncommon but irregular spring/summer visitor; no suitable nesting habitat.
<i>Sterna antillarum browni</i> California least tern	FE	SE	Uncommon but irregular spring/summer visitor; no suitable nesting habitat.
<i>Thalasseus elegans</i> elegant tern	—	SSC	Rare spring/summer visitor; no suitable nesting habitat.
<i>Coccyzus americanus occidentalis</i> western yellow-billed cuckoo	FC	SE	Very rare migrant (5 or fewer records); potentially suitable nesting habitat.

TABLE 2 (Continued)
SUMMARY OF SPECIAL STATUS WILDLIFE SPECIES
AT HUNTINGTON (BEACH) CENTRAL PARK

Species	Status		Occurrence
	USFWS	CDFG	
<i>Asio flammeus</i> short-eared owl	—	SSC	Very rare migrant (5 or fewer records); does not breed in region.
<i>Asio otus</i> long-eared owl	—	SSC	Very rare winter visitor (5 or fewer records); potentially suitable nesting habitat.
<i>Athene cunicularia</i> burrowing owl	—	SSC	No record, but potential to occur; potentially suitable wintering and nesting habitat.
<i>Chaetura vauxi</i> Vaux's swift	—	SSC	Common migrant; does not breed in region.
<i>Cypseloides niger</i> black swift	—	SSC	Rare migrant; no suitable nesting habitat.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher	FE	SE	Uncommon migrant (including all subspecies); potentially suitable nesting habitat.
<i>Myiarchus tyrannulus</i> brown-crested flycatcher	—	SSC	Rare migrant and winter visitor (5 or fewer records); does not breed in region.
<i>Pyrocephalus rubinus</i> vermillion flycatcher	—	SSC	Rare migrant (5 or fewer records); potentially suitable nesting habitat, but rare breeder in region.
<i>Lanius ludovicianus</i> loggerhead shrike	—	SSC	Uncommon year-round breeding resident until less than 10 years ago, but now rare winter visitor.
<i>Vireo bellii pusillus</i> least Bell's vireo	FE	SE	Rare spring/summer/fall visitor and very rare winter visitor (5 or fewer records); suitable nesting habitat but no successful breeding yet.
<i>Eremophila alpestris actia</i> California horned lark	—	SSC	Generally uncommon summer visitor and common winter visitor, but irregular; potentially suitable nesting habitat.
<i>Progne subis</i> purple martin	—	SSC	Rare migrant; potentially suitable nesting habitat, but rare breeder in region.
<i>Riparia riparia</i> bank swallow	—	ST	Rare migrant; does not breed in region.
<i>Poliptila californica californica</i> coastal California gnatcatcher	FT	SSC	Very rare (5 or fewer records) with breeding in 2002 and 2003 (nest probably on O.C. Transfer Station and not in "park proper").
<i>Toxostoma bendirei</i> Bendire's thrasher	—	SSC	Very rare migrant (5 or fewer records); does not breed in region.
<i>Vermivora virginiae</i> Virginia's warbler	—	SSC	Rare migrant; does not breed in region.
<i>Dendroica petechia brewsteri</i> western yellow warbler	—	SSC	Common migrant, uncommon breeder, rare winter visitor; suitable nesting habitat.
<i>Icteria virens</i> yellow-breasted chat	—	SSC	Rare migrant and rare summer resident (no confirmed breeding); suitable nesting habitat.
<i>Piranga rubra</i> summer tanager	—	SSC	Rare migrant and summer and winter visitor; does not breed in region.
<i>Agelaius tricolor</i> tricolored blackbird	—	SSC	Common year-round breeding resident into 1980s but decline noted in early 1990s and continues; currently rare.
LEGEND			
Federal (USFWS)		State (CDFG)	
FE	Endangered	SE	Endangered
FT	Threatened	ST	Threatened
FC	Candidate Species	SSC	Species of Special Concern

In summary, the above tables indicate that any actions in Central Park that would affect potential habitat for the southwestern willow flycatcher, least Bell's vireo, and coastal California gnatcatcher. Focused surveys are warranted to determine if the action would result in any impacts on those species. Surveys may also be warranted for southern tarplant, Coulter's goldfields, Sanford's arrowhead, San Bernardino aster, burrowing owl, and tricolored blackbird under CEQA (Section 15380) criteria.

SECTION 4.0 REFERENCES

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