HELIX
Environmental Planning

Cuyamaca College 2013 Facilities Master Plan Update

Biological Technical Report

November 2018

Prepared for:
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Cuyamaca College 2013 Facilities Master Plan
Biological Technical Report

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EXECUTIVE SUMMARY

The Grossmont-Cuyamaca Community College District (District) is proposing to expand its Cuyamaca College (College) campus facilities as described in the 2013 Facilities Master Plan Update (District 2013), as amended and refreshed in 2017 by Gensler (Gensler 2017) (Master Plan). HELIX Environmental Planning, Inc. (HELIX) performed an updated general biological survey and prepared this updated biological technical report at the request of the District to address the updated baseline conditions present on the College campus since the existing Master Plan was adopted in 2004. The purpose of this report is to describe current biological conditions in and around the proposed project location, and to reexamine possible direct and indirect impacts from the Master Plan build out on biological resources on campus. Assessment of those impacts is made primarily pursuant to requirements in the California Environmental Quality Act, which provide a framework for the analysis and public disclosure of environmental impacts from proposed projects under the Master Plan.

HELIX biologists Stacy Nigro, George Aldridge, and Beth Ehsan conducted general biological surveys in November 2013 and October 2017. The total survey area was 164.7 acres and 20 vegetation communities were mapped. The survey occurred within the College, which is within the boundaries of the adopted County of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan (County MSCP Subarea Plan; County of San Diego [County] 1997). Vegetation communities on campus include developed land (93.2 acres), arundo-dominated riparian (0.33 acre), freshwater marsh (0.05 acre), herbaceous wetland – disturbed phase (0.11 acre), maritime succulent scrub (0.3 acre), mule fat scrub (0.06 acre), southern arroyo willow riparian forest (2.26 acres), southern cottonwood-willow riparian forest (0.40 acre), southern riparian forest (0.16 acre), southern willow scrub (including disturbed phase; 0.85 acre), baccharis scrub (including sparse phase; 6.7 acres), Diegan coastal sage scrub (including disturbed phase; 42.6 acres), non-native grassland (including broad-leaf dominated; 9.8 acres), disturbed habitat (5.2 acres), eucalyptus woodland (1.0 acre), non-native vegetation (1.2 acres), and tamarisk scrub (0.58 acre).

In the context of the MSCP, sensitive natural communities include Tier I through Tier III habitat types. Of the 20 vegetation communities mapped on campus, 13 are considered sensitive natural communities. Arundo-dominated riparian, freshwater marsh, herbaceous wetland, maritime succulent scrub, mule fat scrub, southern arroyo willow riparian forest, southern cottonwood-willow riparian forest, southern riparian forest, and southern willow scrub are considered Tier I habitat. Baccharis scrub and Diegan coastal sage scrub are considered Tier II habitat. Non-native grassland is considered Tier III habitat. Two special-status plant species have been observed on campus: Palmer's goldenbush (*Ericameria palmeri* ssp. *palmeri)* and San Diego marsh-elder (*Iva hayesiana*). A single rare or uncommon plant species, San Diego sunflower (*Bahiopsis laciniata*), has also been observed on campus. Six sensitive animal species have been observed on campus. These include the federally threatened coastal California gnatcatcher (*Polioptila californica californica*) and five non-listed animal species designated as California State species of special concern and/or County sensitive.

In 1994, prior to the adoption of the County MSCP Subarea Plan, the District obtained a Habitat Loss Permit (HLP) from the County for impacts to coastal sage scrub habitat and the coastal

California gnatcatcher (County 1994). As a result of the HLP and upon adoption of the MSCP, portions of the campus were afforded take authorized designation, which has allowed development to occur provided findings of conformance with the County's MSCP Subarea Plan are made. The take authorized designation was given based on implementation of conditions in the 1994 HLP, which also required that preserve areas be established on campus that contain 47.5 acres of native habitat made up of preserved, enhanced, and restored coastal sage scrub. Portions of these preserve areas were designated as MSCP Hardline Preserve when the County MSCP Subarea Plan was adopted. Since the HLP was issued and the MSCP Hardline Preserve and take authorized designations went into effect, the District has respected MSCP Hardline Preserve boundaries and has restricted development to take authorized areas on campus.

The proposed Master Plan projects primarily include replacement and renovations of existing facilities within the developed and take authorized portions of campus. However, several Master Plan projects not evaluated in the previous 2004 Facilities Master Plan Environmental Impact Report (EIR) were determined to have the potential to impact biological resources, thus warranting analysis in the Master Plan Addendum and in this report. Potential significant impacts were identified in the biological resources issue areas of special-status species, sensitive natural communities, and federally-protected wetlands. Construction of the parking lot expansion Master Plan project could result in direct impacts to sensitive natural communities including 0.05 acre of herbaceous wetland (Tier I), 0.01 acre of southern arroyo willow riparian forest (Tier 1), 0.01 acre of southern willow scrub (Tier I), 0.07 acre of Diegan coastal sage scrub (Tier II), 1.5 acres of baccharis scrub (Tier II), and 3.0 acres of non-native grassland, including broad-leaf dominated (Tier III); however, impacts to baccharis scrub and non-native grassland would not be significant because they would occur within the take authorized portion of the campus. Herbaceous wetland, southern arroyo willow riparian forest, and southern willow scrub habitat types qualify as potential jurisdictional waters and wetlands, and impacts would be subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers, Regional Water Quality Control Board, and California Department of Fish and Wildlife. If completed during the breeding season, construction of the parking lot expansion and community field relocation projects could result in direct or indirect impacts to coastal California gnatcatcher. In addition, Master Plan project construction could result in direct impacts to nesting birds, including raptors, protected under the Migratory Bird Treaty Act and California Fish and Game Code. Last, projects could result indirect impacts related to non-native plant species, human/edge effects, night lighting, and noise.

Measures related to the following topics are proposed herein to mitigate potential impacts of Master Plan construction and operation: project-level avoidance of sensitive natural communities; habitat-based compensatory mitigation; orange construction fencing; construction staging areas; biological monitoring during construction; project-level coastal California gnatcatcher surveys; coastal California gnatcatcher avoidance; nesting bird breeding season avoidance; project-level wetland delineation studies; wetland permits; restrict non-native invasive plants from landscaping; and minimize night lighting. Successful implementation of these measures would mitigate potential impacts below a level of significance.

1.0 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This biological technical report was prepared at the request of the Grossmont-Cuyamaca Community College District (District) to provide the District, federal, state, and local agencies, and the public with information to assess the potential impacts from the implementation of the facilities at the District's Cuyamaca College (College) campus as proposed in the 2013 Facilities Master Plan Update (District 2013), as amended and refreshed in 2017 by Gensler (Gensler 2017) (Master Plan). Assessment of those impacts is made primarily pursuant to requirements in the California Environmental Quality Act (CEQA) that provide a framework for the analysis and public disclosure of environmental impacts from proposed projects under the Master Plan.

1.2 PROJECT LOCATION AND DESCRIPTION

1.2.1 Project Location

The Cuyamaca College campus, also referred to herein as the project site or site, is generally located north and west of Highway 54 (Jamacha Road), south of Interstate 8, and east of Highway 125 in the unincorporated community of Rancho San Diego, San Diego County, California (Figure 1). The site is depicted within unsectioned lands of Township 15 South, Range 1 West, San Bernardino Meridian, U.S. Geological Survey (USGS) Jamul Mountains Quadrangle (Figure 2). More specifically, the site is located north of Jamacha Road and west of Fury Lane at the address of 900 Rancho San Diego Parkway (Figure 3). In total, the site encompasses approximately 165.0 acres of land, approximately half of which is currently developed with existing campus facilities.

1.2.2 Project Description

In 2004, the District adopted its 2003 Facilities Master Plan for the Cuyamaca College campus and certified the Cuyamaca College Master Plan Final EIR (2004 Final EIR; SCH No. 2003051013) (HELIX 2004). Over the nine years since the plan was adopted, the District has implemented several campus construction projects identified in the 2003 Facilities Master Plan using funds from the state as well as Proposition R, a local bond measure passed by East County voters in 2002. The District has subsequently developed a new educational master plan, which lead to an update to the previous Facilities Master Plan. The Master Plan (Figure 4) was developed to translate the District's updated priorities for student learning into recommendations for the development of facilities for the campus. Several projects in 2003 Facilities Master Plan have been deferred because of funding to the Master Plan. Several additional projects have been added to the plan to address new needs of the District. In November 2012, a new bond measure was passed (i.e., Proposition V) to fund the continued construction of campus improvements.

The District has identified in the Master Plan several future construction projects to be developed over the next few decades to accommodate educational needs and anticipated student growth. The projects involve a combination of the demolition/replacement of older facilities, renovation/modernization of existing facilities and new facility construction. The following

construction projects are anticipated on campus according to the Master Plan: student services/administration building, academic classroom building, horticultural building, exercise science building expansion, child development center renovation, stadium seating/lighting improvements, recreation facility relocations, minor road improvements, parking lot expansions, entry signage, and a third campus entry. A variety of campus-wide sustainability improvements are also planned to reduce water and energy usage. Collectively, these projects would increase on-campus space by approximately 53,500 net assignable square feet.

1.3 REGIONAL PLANNING CONTEXT

The County of San Diego Multiple Species Conservation Program (MSCP) Subarea Plan (County MSCP Subarea Plan) establishes a regional conservation planning framework for biological resources and development projects occurring in portions of unincorporated San Diego County (County 1997). The MSCP addresses the potential impacts of urban growth, natural habitat loss and species endangerment and creates a plan to mitigate for the potential loss of covered species and their habitat due to the direct impacts of future development of both public and private lands within the MSCP area. The County MSCP Subarea Plan includes coverage for 85 species based on meeting conservation goals and objectives. The County MSCP Subarea Plan and its associated Implementing Agreement establish the conditions under which the County, for the benefit of itself and of public and private landowners and other land development project proponents within the adopted boundaries, will receive from the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) certain long-term take authorizations that will allow the taking of certain covered species incidental to land development and other lawful land uses which are authorized by the County. This also includes an acknowledgment that the MSCP satisfies conditions established in the federal Endangered Species Act (ESA) Section 4(d) Special Rule for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*).

The County's Subarea Plan is divided into three Segments: Lake Hodges, Metropolitan-Lakeside-Jamul, and South County. Figure 1-2 of the County MSCP Subarea Plan shows the areas authorized for take. The Cuyamaca College campus is located within the South County Segment of the County MSCP Subarea Plan and is recognized as having "Take Authorized Area" and "No Take Authorized" designations on Figure 1-2.

In 1994, and prior to the adoption of the County MSCP Subarea Plan, the District obtained a Habitat Loss Permit (HLP) from the County for impacts to coastal sage scrub habitat and the coastal California gnatcatcher (County 1994). The HLP was issued pursuant to the ESA Section 4(d) Special Rule for the coastal California gnatcatcher and Natural Community Conservation Planning (NCCP) program during an interim period prior to the MSCP being formally adopted.

As a result of the HLP and upon adoption of the MSCP, lands on campus were afforded two formal designations recognized on Figure 1-2 of the County MSCP Subarea Plan:

1. "No Take Authorized" lands, whereby no developments are allowed and MSCP Hardline Preserve is established; and,

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Regional Location Map

CUYAMACA COLLEGE 2013 FACILITIES MASTER PLAN UPDATE

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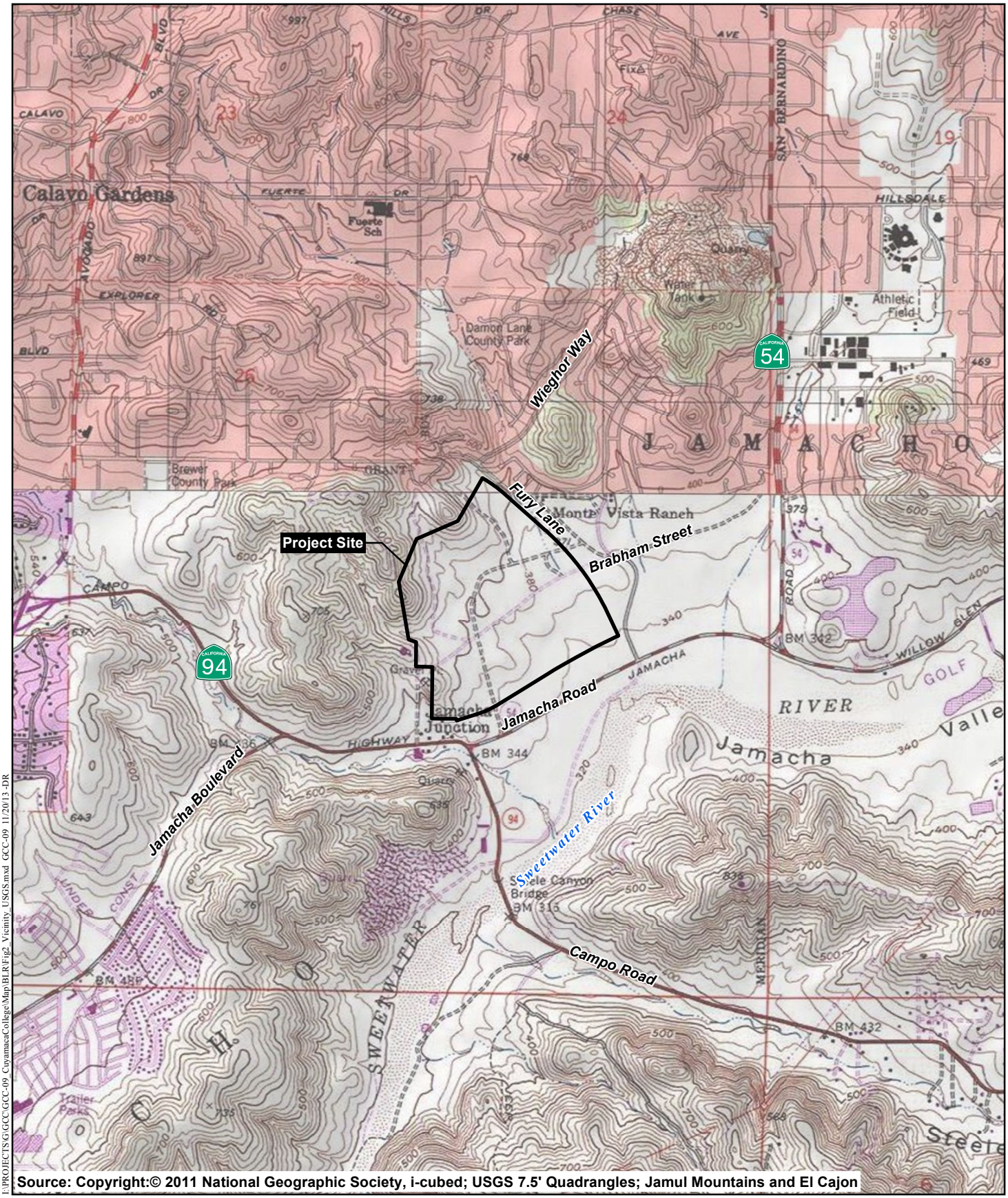
Figure 1



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Project Vicinity Map (USGS Topography)

CUYAMACA COLLEGE 2013 FACILITIES MASTER PLAN UPDATE

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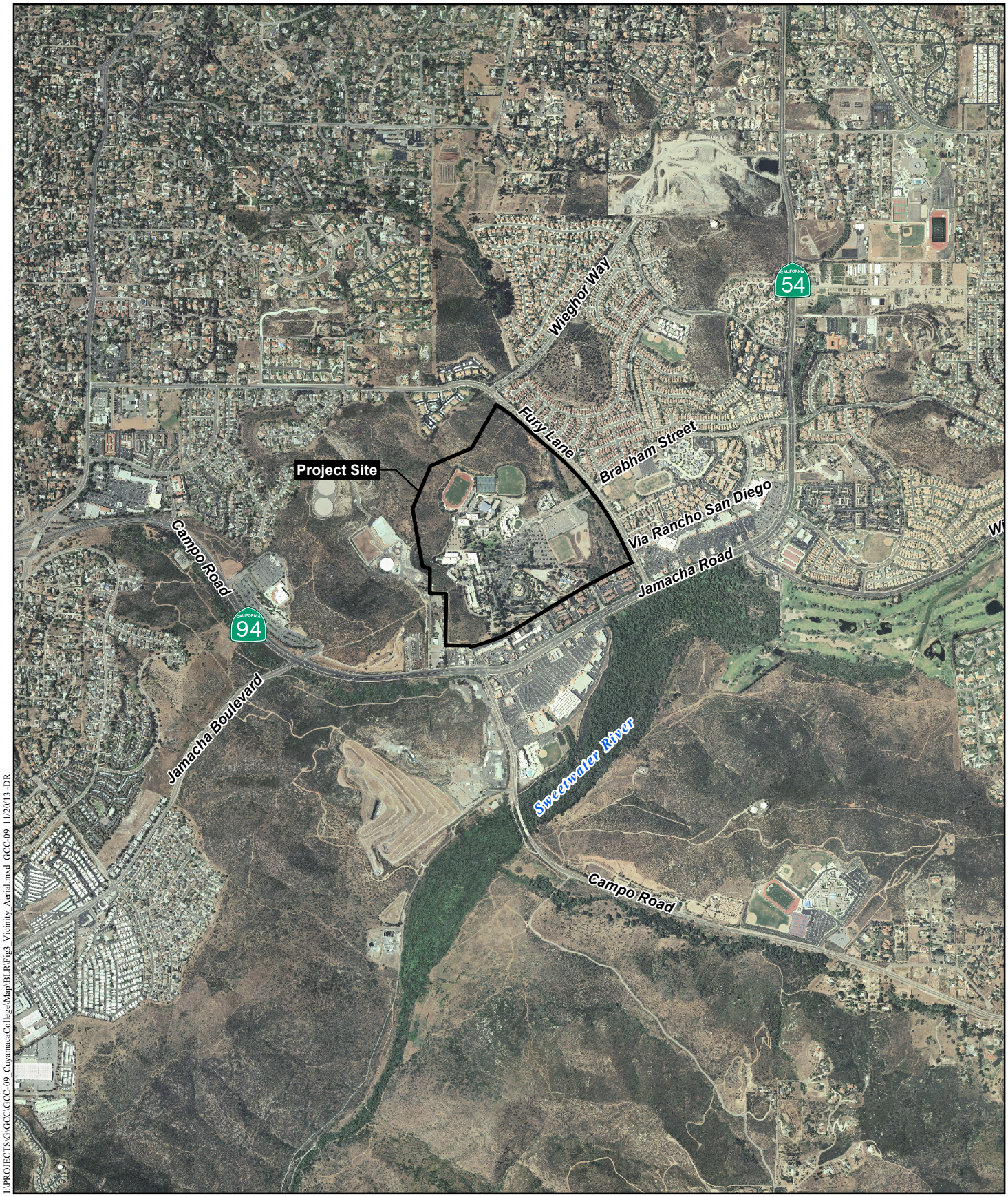
Figure 2



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Project Vicinity Map (Aerial Photograph)

CUYAMACA COLLEGE 2013 FACILITIES MASTER PLAN UPDATE

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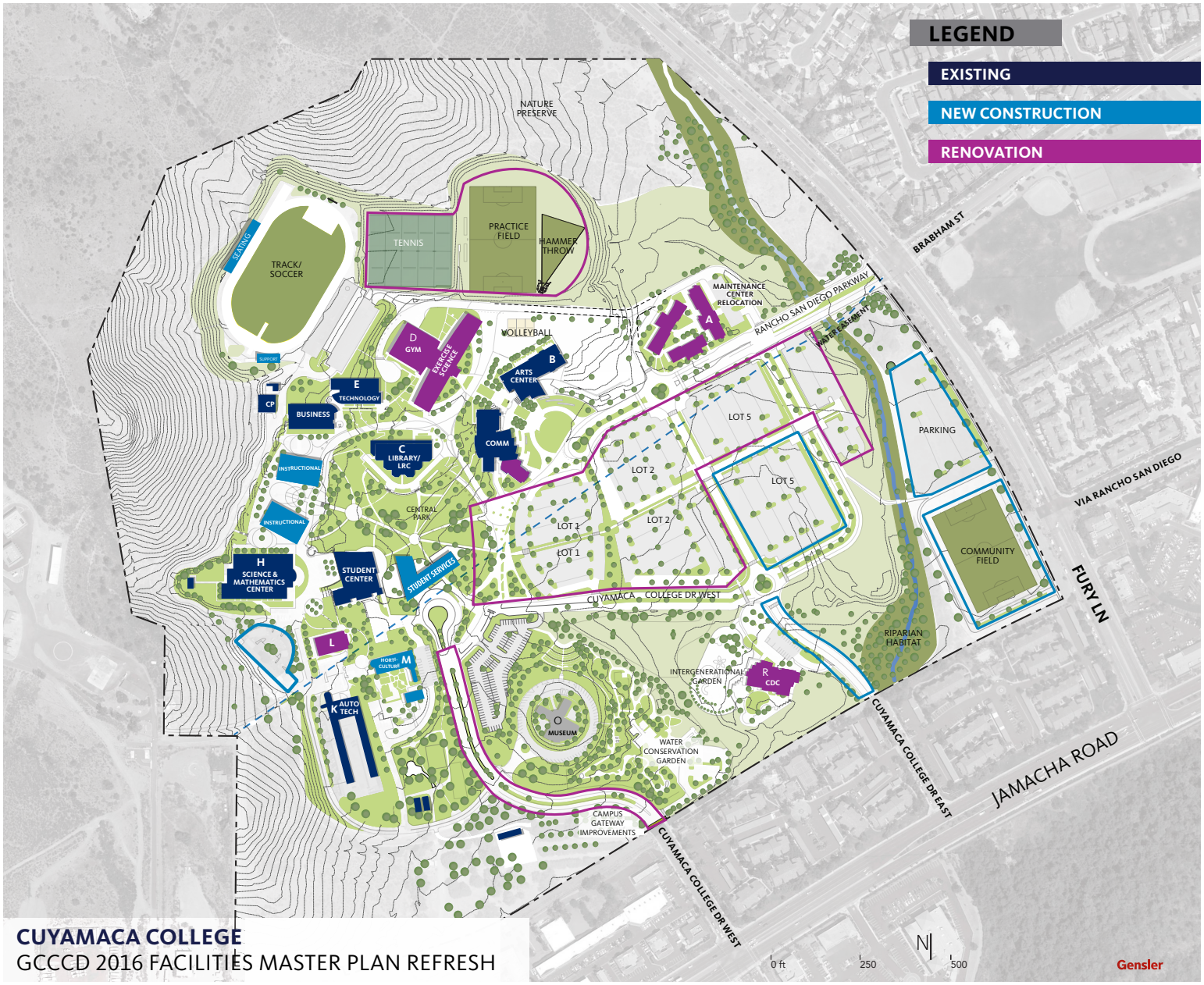
0 2,000 Feet

Figure 3



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Source: Gensler 2017

Recommended Facilities Plan

CUYAMACA COLLEGE 2013 FACILITIES MASTER PLAN UPDATE

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Figure 4

2. "Take Authorized Area" lands, whereby take of habitat and species covered by the County's MSCP Subarea Plan is allowed.

The take authorized designation allows development to occur on campus provided two findings of conformance with the County's MSCP Subarea Plan can be made: (1) the project has been identified in the County's MSCP Subarea Plan Figure 1-2 as a "Take Authorized Area"; and, (2) the project has been designed to conform to the requirements of the County's MSCP Subarea Plan.

The take authorized designation was given based on implementation of conditions in the 1994 HLP issued to the District by the County, which also required that the following occur on campus:

- 16.2 acres of coastal sage scrub be preserved on campus;
- 2.4 acres of disturbed coastal sage scrub be preserved and enhanced on campus;
- 21.9 acres of disturbed coastal sage scrub be preserved on campus; and
- 7.0 acres of disturbed non-native or ruderal habitat types be restored to coastal sage scrub on campus.

In total, the HLP requires that preserve areas on campus contain 47.5 acres of native habitat made up of preserved, enhanced, and restored coastal sage scrub.

2.0 METHODOLOGIES

HELIX Environmental Planning, Inc. (HELIX) conducted general biological surveys and vegetation mapping of the District campus on October 3, 2001 and July 15, 2003, in support of previous master planning efforts. General biological surveys were performed, and vegetation mapping was updated again by HELIX in November 2013 and again in October 2017, in support of the Master Plan.

Other surveys conducted on campus include USFWS protocol surveys for the federally threatened coastal California gnatcatcher conducted by Merkel & Associates, Inc. in June/July 2001 and by Sweetwater Environmental Biologists, Inc. (SEB) on the entire campus in May 1993. Additionally, vegetation mapping was initially conducted by SEB throughout the campus in 1993.

Updated searches of an in-house database and the CDFW California Natural Diversity Data Base (CNDDB) were made to determine listed or sensitive species that currently have potential to occur on the campus.

2.1 SURVEY LIMITATIONS

Few survey limitations exist at the campus. Numerous campus visits have been performed, and during each visit, the total species list for the campus has been expanded as new species are observed. Since all surveys were conducted during the daylight hours, the presence of nocturnal

animals such as coyotes (*Canis latrans*), raccoons (*Procyon lotor*), bats, and rodents could only be determined by indirect sign (e.g., tracks, scat, or burrows).

No focused species surveys were performed because of the programmatic nature of the assessment and because the large majority of development would occur within areas designated as take authorized. The campus is outside the survey area for the Quino checkerspot butterfly (*Euphydryas editha quino*) pursuant to the 2014 USFWS survey protocol (USFWS 2014). No federally or state listed species not covered by the County's MSCP Subarea Plan are expected to occur on campus in the take authorized areas that are to be impacted.

3.0 ENVIRONMENTAL SETTING

3.1 REGIONAL CONTEXT

The campus occurs in the unincorporated community of Rancho San Diego, which is generally located approximately 12.0 miles east of downtown San Diego in southwestern San Diego County. The bioregion that generally defines the area is influenced by a coastal Mediterranean climate. The area's climate, coupled with geological formations and land features, give rise to an array of habitat types and species that are unique to southern California. Although urbanization has resulted in the conversion of land within much of the region, habitat blocks and linkages of undeveloped land occur amongst existing developments that provide important habitat for plant and animal species that reside and migrate to and from the area. Much of the coastal lands and flat, mesa-topped inland areas in the region have been developed. Larger habitat blocks exist along steep slopes and valley bottoms associated with the region's canyons. Expansive undeveloped lands occur east of the campus toward McGinty Mountain. Grasslands, coastal sage scrub, chaparral, riparian woodlands and forests, and riverine and palustrine habitats contribute to the overall biological value and aesthetic appeal of the region.

The campus is situated in the extreme northern portion of the South County Segment of the County MSCP Subarea Plan. Lands within the Metro-Lakeside-Jamul Segment occur to the immediate north. Within the 82,767 acres in the South County Segment, approximately 48,240 acres are open space. The South County Segment preserve area includes much of the river bottom lands within County jurisdiction of the Otay River and the Sweetwater River above the Sweetwater Reservoir to Highway 94. Substantial habitat areas include Otay Mountain; the lower Otay River and Otay Lakes; and the bulk of the Jamul Mountains, with linkages to the large area including San Miguel Mountain and upper Sweetwater River south of Highway 94 and Willow Glen Drive. These lands link up with U.S. Forest Service lands, including the Hauser and Pine Creek Wilderness areas, and ultimately to other State and Federal managed lands covering much of the eastern one-half of San Diego County. On McGinty Mountain to the east of the Cuyamaca College campus, a combination of lands currently or previously owned and managed by The Environmental Trust, State of California, San Diego County and The Nature Conservancy cover much of the top of McGinty Mountain. These lands are separated from other lands in the preserve assemblage by Jamul Drive and parts of rural Jamacha and Jamul. South of Jamul Drive, the approved Loma Del Sol HLP area, Las Montañas and BLM parcels form a contiguous core and linkage to Hidden Valley Estates. Northwest of Hidden Valley Estates and south of the Cuyamaca College campus, undeveloped

portions of the National Wildlife Refuge property cover the bottomlands and slopes along both sides of the Sweetwater River. To the north of Sweetwater Reservoir and southwest of the Cuyamaca College campus, preserved lands within Pointe San Diego extend on both sides of Jamacha Boulevard to the lower slopes of Dictionary Hill. East and south of the Sweetwater Reservoir, off-site mitigation parcels acquired by Pointe San Diego and Hidden Valley Estates, as well as Sweetwater II are included in the preserve (County 1997).

3.2 GENERAL LAND USE

The campus generally consists of academic and administrative buildings, physical education/ recreation facilities, surface parking lots, horticultural areas, and undeveloped land (Figure 4). Campus developments are generally situated in the central and southern portions of the campus. Undeveloped land generally occurs in the extreme northern, eastern, and western portions of campus.

Adjacent land uses generally consist of residential development and Damon Lane County Park to the north; residential, commercial retail, and Hillsdale Middle School to the east; residential and commercial retail (Plaza Rancho San Diego) to the south; and Otay Water District (OWD) facilities and undeveloped land to the west. More specifically, single-family residential development is located to the northeast along Fury Lane, while multi-family residential uses are located along the southern campus boundary as well as to the east. A commercial retail strip mall is located to the south along Jamacha Road, and a large regional shopping center (Rancho San Diego Towne Center) is situated at the southeast corner of Jamacha and Campo Roads. Additional commercial retail uses are located adjacent to the southeast campus boundary. Undeveloped land consisting of sloping hillsides and above-ground reservoirs owned by the OWD are located to the west. A large area of riparian habitat on the Sweetwater River is located to the southeast beyond the multi-family residential and across Jamacha Road.

3.3 DISTURBANCE

The project site contains evidence of a variety of unnatural, anthropogenic-related disturbances. Minor natural disturbances are also evident that include those associated with erosion on steeper slopes in the northern and western portions of the campus. The most significant disturbances on site include those associated with previous clearing of natural vegetation and operation of existing facilities. The large majority of the site has been previously impacted and improved for campus developments. Buildings, parking lots, and other improvements for the existing campus generally occupy the central, southern, and eastern portions of the site. Undeveloped land along the fringe of existing development displays evidence of previous grading, revegetation, and routine maintenance for weed control and facilities management. These areas are characterized by compacted, bare soils and a dominance of non-native ornamental or ruderal (weedy) plant species.

Pedestrian use, vehicle traffic, noise, nighttime lighting, and other disturbances related to existing developments are evident throughout the project site. Multiple trails run through the undeveloped portions of the campus, some of which are regularly utilized by students and cross-country runners. Relatively easy access into the northern portion of the campus from Fury Lane has resulted in disturbances related to illegal trespass and recreation. Most notably, off-road bicyclists had

previously established a bicycle motocross (BMX) track adjacent to Fury Lane in the northern portion of the campus. Establishment of the BMX track resulted in loss and degradation to native habitat, and ongoing use likely has an adverse effect on wildlife use of the area. The campus removed the track bumps and no evidence of BMX use was observed during the October 2017 survey. Two apparent homeless encampments were observed in riparian areas on the east side of campus during the October 2017 survey. The existing project site developments, coupled with the surrounding residential and transportation developments, have resulted in removal and fragmentation of native habitat and preclude the use of the local area by a number of animal species known to occur in the region. The existing developments represent a physical barrier and disturbance to animal species attempting to move to and from undeveloped habitats located in the vicinity of the site. Reptile and mammal species are expected to be most affected by the existing barriers, whereas birds and other avian species are expected to be less affected and could still use the fragmented habitat for migration and dispersal.

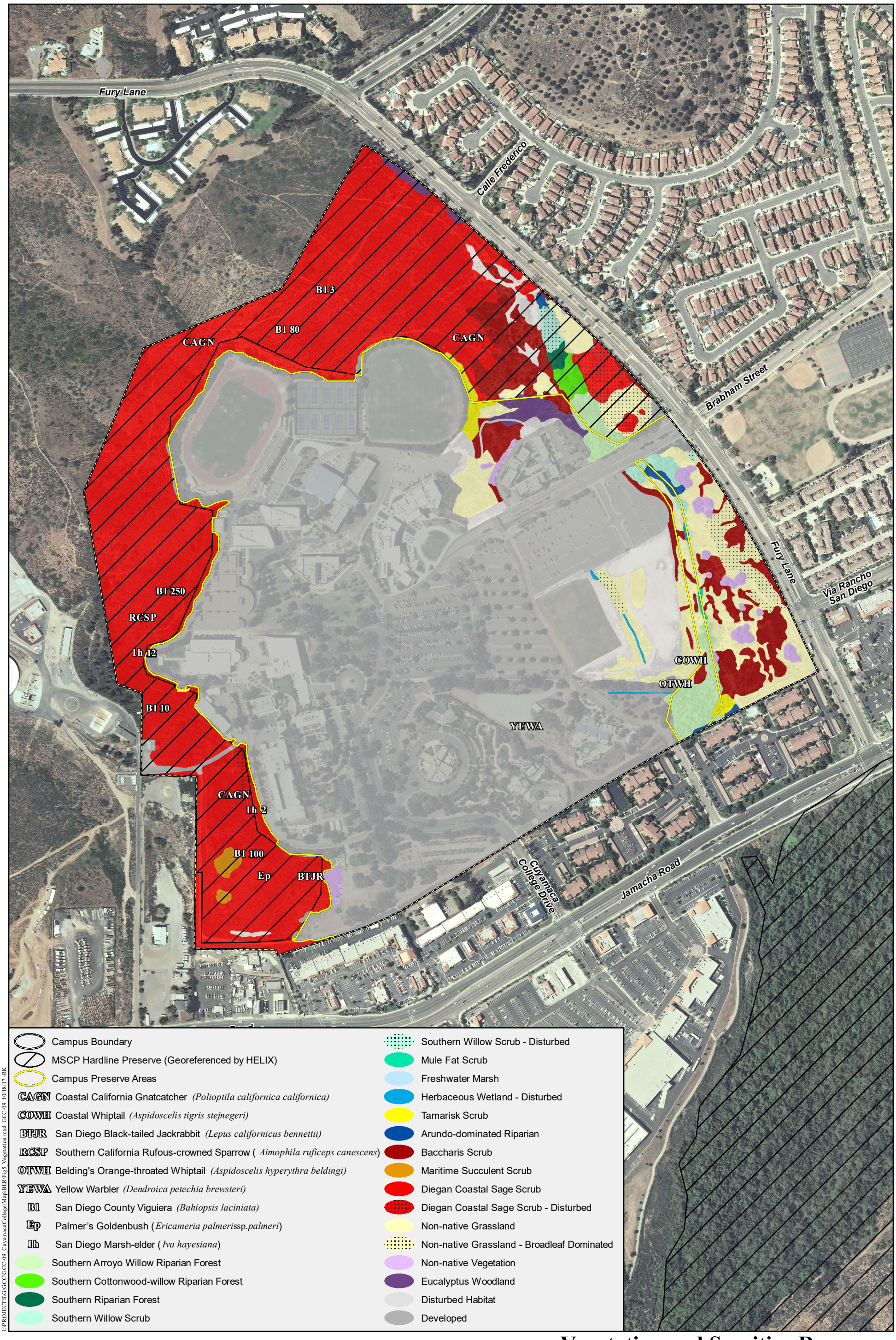
3.4 TOPOGRAPHY AND SOILS

The topography of the campus consists of flat to gently rolling hills with steeper hillsides rising above the campus to the north and west. The southern and eastern portions of the campus are relatively level. Elevations range from approximately 600 feet above mean sea level (amsl) in the western portion of the campus to approximately 340 feet amsl in the eastern portion. Prior to development of the campus, the soils present consisted of Friant rocky fine sandy loam, Las Posas fine sandy loam and Placentia sandy loam (Bowman 1973). Portions of the campus have had the native soils graded and/or covered with fill material.

A north-south trending, unnamed drainage feature traverses the eastern portions of the campus. The feature is a tributary to the Sweetwater River further to the south of campus. The drainage enters the northeastern portion of the campus, adjacent to Fury Lane, via a box culvert that conveys storm water and nuisance flow discharges from surrounding development. Surface flows within the drainage feature on campus are primarily ephemeral, with some areas receiving intermittent flows as a result of regular nuisance flows from irrigation runoff. The near entirety of the feature supports a riparian canopy, albeit sparse and dominated by non-native species in areas. The drainage feature and its associated riparian corridor are contained within campus preserve areas.

3.5 VEGETATION COMMUNITIES

A total of 20 vegetation communities and developed land has been mapped on the 164.7-acre campus based on 2013 surveys (Table 1; Figure 5). Descriptions of these communities are provided below. Habitat classification codes according to Holland (1986) and tiers according to the MSCP (County 1997) are noted in the table.



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Vegetation and Sensitive Resources

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0 400 Feet

Figure 5

Table 1
EXISTING VEGETATION COMMUNITIES

VEGETATION COMMUNITY[1]	AREA[2] (acres)
Tier I[3]	
Arundo-dominated riparian (65100)	0.33
Freshwater marsh (52400)	0.05
Herbaceous wetland – disturbed phase (52510)	0.11
Maritime succulent scrub (32400)	0.3
Mule fat scrub (63310)	0.06
Southern arroyo willow riparian forest (61320)	2.26
Southern cottonwood-willow riparian forest (61330)	0.40
Southern riparian forest (61300)	0.16
Southern willow scrub (including disturbed phase; 63320)	0.85
Tier II	
Baccharis scrub (including sparse phase; 32000)	6.7
Diegan coastal sage scrub (including disturbed phase; 32500)	42.6
Tier III	
Non-native grassland (including broad-leaf dominated; 42200)	9.8
Tier IV	
Disturbed habitat (11300)	5.2
Eucalyptus woodland (11100)	1.0
Non-native vegetation (11000)	1.2
Tamarisk scrub (63810)	0.58
OTHER	
Developed (12000)	93.2
TOTAL	**164.8**

[1] Community names and codes are from Holland (1986) and Oberbauer (1996).
[2] Wetland acreage is provided to two decimal places and upland acreage to one decimal place. Total reflects rounding error.
[3] Vegetation communities within the MSCP study area are divided into four Tiers of sensitivity based on rarity and ecological importance. Tier I habitats are considered to be the most sensitive and Tier IV habitats are considered to be the least.

Arundo-dominated Riparian

Arundo-dominated riparian habitat is characterized by a densely-vegetated riparian thicket almost exclusively dominated by giant reed (*Arundo donax*). Approximately 0.33 acre of Arundo-dominated riparian occurs as two small stands at the southern and northern extremes of the unnamed drainage feature and riparian corridor on the east side of the campus. Arundo-dominated riparian habitat is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Freshwater Marsh

Freshwater marsh is dominated by perennial, emergent monocots often forming a closed canopy. This vegetation type occurs in sites permanently flooded by fresh water. On campus, this community is dominated by broad-leaved cattails (*Typha latifolia*), cress (*Rorippa* sp.), and mule

fat. During the October 2017 survey, this area consisted mostly of unvegetated streambed with scattered mule fat, evidence that the vegetation composition of the area may change from year to year in response to the amount of water it receives. Approximately 0.05 acre occurs in association with the unnamed drainage and riparian corridor that traverses the eastern portions of the campus. Freshwater marsh is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Herbaceous Wetland – disturbed phase

Herbaceous wetlands are seasonal wetlands that support mostly annual species not associated with freshwater marsh. They may occur only in wetter than average years, or in swales adjacent to wetlands. This community occurs in the unnamed drainage on the east side of campus, where it consists mostly of non-native and ruderal native species associated with disturbed drainage channels, in a small channel fed by runoff from the parking lot south of Rancho Santa Fe Parkway, where it consists mostly of broad-leaf non-native species and native deergrass (*Muhlenbergia rigens*), and in a small channel fed by runoff from the parking lot east of Cuyamaca College Drive East, where it consists largely of unvegetated streambed and also supports tamarisk (*Tamarix* sp.), cocklebur (*Xanthium strumarium*), beardgrass (*Polypogon monspeliensis*), and tall flatsedge (*Cyperus eragrostis*). In total, this community covers 0.11 acre on campus. Herbaceous wetland is considered a sensitive natural community due to its association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Maritime Succulent Scrub

Maritime succulent scrub is a low, open scrub community dominated by a mixture of stem and leaf succulent species and drought-deciduous species that occur within sage scrub communities. This plant association occurs on thin rocky or sandy soils, on steep slopes of coastal headlands and bluffs. Maritime succulent scrub is typically restricted to within a few miles of the coast from about Torrey Pines to Baja California, Mexico and on San Clemente and Catalina islands. The component species of this plant community on campus are prickly pear cactus (*Opuntia littoralis*), coastal cholla (*Opuntia prolifera*), California sagebrush (*Artemisia californica*), San Diego sunflower (*Bahiopsis laciniata*), black mustard (*Brassica nigra*), and phacelia (*Phacelia* sp.). Two patches totaling 0.3 acre occur on an east-facing slope in the southwest corner of the campus. Maritime succulent scrub is considered a sensitive natural community due to its suitability for special-status species and rarity as an upland habitat type. It is considered a Tier I MSCP habitat.

Mule Fat Scrub

Mule fat scrub is a depauperate, tall, herbaceous riparian scrub dominated by mule fat (*Baccharis salicifolia*) and maintained by frequent flooding. This habitat type typically occurs along intermittent streams with coarse soils. Mule fat scrub is often peripheral to stands of riparian forest or willow scrub. This habitat occurs along the unnamed drainage on the east side of campus, south of Rancho Santa Fe Parkway, and covers approximately 0.06 acre. Mule fat scrub is considered a sensitive natural community due to its association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Southern Arroyo Willow Riparian Forest

Southern arroyo willow riparian forest is typically dominated by an arborescent form of arroyo willows (*Salix lasiolepis*) with a second canopy layer of other willow species (*Salix* spp.), such as red willow (*S. laevigata*) and black willow (*S. gooddingii*). The plant community also often contains mule fat, coast live oak (*Quercus agrifolia*), and western sycamore (*Platanus racemosa*). This community occurs in floodplains along major streams and rivers in southern California. Southern arroyo willow riparian forest on campus is dominated by these species and occurs as a 2.26-acre swath along the unnamed drainage and riparian corridor in the southeast portion of the campus. Southern arroyo willow riparian forest is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Southern Cottonwood-Willow Riparian Forest

Southern cottonwood-willow riparian forest is composed of winter-deciduous trees that require water near the soil surface. Willows (*Salix* spp.), cottonwoods (*Populus* spp.), and western sycamore form a dense medium height woodland or forest in moist canyons and drainage bottoms. Associated understory species include mule fat and stinging nettle (*Urtica dioica* ssp. *holosericea*). An approximately 0.40-acre stand of this habitat occurs along the unnamed drainage and in association with the riparian corridor north of Rancho San Diego Parkway. Southern cottonwood-willow riparian forest is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Southern Riparian Forest

Southern riparian forest is a dense riparian forest that cannot be differentiated into any sub-type. Characteristic species of this community include cottonwood, western sycamore, willow, mule fat, and many herbaceous wetland plants. This community occurs in a 0.16-acre patch near the northern end of the unnamed drainage on the east side of campus, and forms a transition between southern cottonwood-willow riparian forest and southern willow scrub. Southern riparian forest is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Southern Willow Scrub (including disturbed phase)

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by shrubby willows in association with mule fat. This habitat occurs on loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. The understory often includes herbaceous species such as curly dock (*Rumex crispus*) and western ragweed (*Ambrosia psilostachya*). Though floristically very similar to southern willow riparian forests, there are differences in physiognomy. Southern willow scrub lacks a tree stratum, and the lower shrub stratum has higher cover and density values. Disturbed patches include a larger proportion of non-native species including Peruvian pepper (*Schinus molle*), carrotwood (*Cupaniopsis anacardioides*), and castor bean (*Ricinus communis*). Southern willow scrub and patches of its

disturbed phase occur along the unnamed drainage on the east side of campus, typically upstream of the denser, taller stands of riparian forest. In total, this community and its disturbed phase cover 0.85 acre. Southern willow scrub is considered a sensitive natural community due to its suitability for special-status species and association with jurisdictional waters and wetlands. It is considered a Tier I MSCP habitat type.

Tamarisk Scrub

Tamarisk scrub is a weedy stand of tamarisk, which are non-native species that displace native riparian vegetation subsequent to a major disturbance. This habitat occurs along intermittent streams in areas where high evaporation rates increase the salinity of the soil. Other species present in the tamarisk scrub on campus include mule fat, cocklebur, goldenbush (*Isocoma* sp.), mustard (*Brassica* sp.), foxtail chess (*Bromus madritensis* spp. *rubens*), and beardgrass.

Tamarisk scrub occurs within upland areas on campus east of the baseball field at the base of the fill slope. This area is not in a natural drainage and is served entirely by irrigation runoff and seepage from the baseball field. Tamarisk scrub covers 0.58 acre on campus.

Baccharis Scrub

This community is not included in Holland (1986), but is a form of scrub vegetation markedly distinct from other coastal scrub types. Baccharis scrub is most often heavily dominated by broom baccharis (*Baccharis sarothroides*) almost to the exclusion of other shrub species, and has a depauperate herbaceous ground cover dominated by non-native grasses and forbs. This community usually occurs in areas that have been disturbed by grading, agriculture, or abandoned detention basins, but is not necessarily succeeding to a more diverse coastal sage scrub species assemblage. The sparse phase has a lower overall shrub cover, and a higher proportion of weedy non-native species. On campus, baccharis scrub occurs in a mosaic with non-native grassland and disturbed habitat in the eastern portion, and covers 6.7 acres. Baccharis scrub is considered a sensitive natural community due to its marginal suitability for special-status species and association with coastal sage scrub-type habitat. It is considered a Tier II MSCP habitat type.

Diegan Coastal Sage Scrub (including disturbed phase)

Diegan coastal sage scrub is a vegetation community commonly characterized by drought-adapted subshrubs. On campus, this vegetative community is dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush, and white sage (*Salvia apiana*). Other species observed include spiny redberry (*Rhamnus crocea*), black sage (*Salvia mellifera*), toyon (*Heteromeles arbutifolia*), and laurel sumac (*Malosma laurina*), all of which are native species common to sage scrub. Diegan coastal sage scrub dominates the hillsides around the northern and western edges of the campus. Small patches of Diegan coastal sage scrub on the eastern edge of campus have a larger proportion of non-native woody and herbaceous species, including eucalyptus and pepper trees, and are considered a disturbed phase of this community with a lower habitat value than the areas in the north and west of campus. Another small stand on the western edge, near existing classroom buildings and a driveway, includes a large proportion of landscape ornamentals and is considered disturbed. Altogether, Diegan coastal sage scrub covers 42.6 acres

of the campus. High quality Diegan coastal sage scrub on campus is considered to be occupied by several special-status species, including the federally listed threatened coastal California gnatcatcher. Diegan coastal sage scrub is considered a sensitive natural community due to its suitability for special-status species and rarity as an upland habitat type. It is considered a Tier II MSCP habitat type.

Non-native Grassland (including broad-leaf-dominated)

Non-native grassland is typically dominated by non-native grasses, but can also contain a very small percentage of native grasses, as well as a percentage of native and non-native forbs. On campus, non-native grasses are primarily bromes (*Bromus* spp.) and oats (*Avena* sp.). Depending on the location, other non-native species present include mustard, yellow star thistle (*Centaurea melitensis*), and fennel (*Foeniculum vulgare*); native species include doveweed (*Eremocarpus setigerus*), vinegar weed (*Trichostema lanceolatum*), and goldenbush. Broad-leaf-dominated non-native grassland occurs in conditions similar to non-native grassland, but has at least 50 percent cover of non-native forbs in addition to non-native grasses. Typical species include black mustard, perennial mustard (*Hirschfeldia incana*), fennel, and star thistle. On campus, areas of broad-leaf-dominated non-native grassland occur in the southeast corner, and are almost entirely covered by perennial mustard. Altogether, non-native grassland occurs in the southeast portion of the campus and covers 9.8 acres. Non-native grassland is considered a sensitive natural community due to its marginal suitability for special-status species. It is considered a Tier III MSCP habitat type.

Disturbed Habitat

Disturbed habitat includes land cleared of vegetation that shows evidence of repeated disturbance, grading, or past construction. Where vegetation is present, some of the non-native plant species within this habitat on campus include Mexican fan palm (*Washingtonia robusta*), tree tobacco (*Nicotiana glauca*), horehound (*Marrubium vulgare*), mustard, star thistle, garland daisy (*Glebionis coronaria*), Russian thistle (*Salsola tragus*), and wild oats (*Avena fatua*). There are some native species present as well, including doveweed, telegraph weed (*Heterotheca grandiflora*), western ragweed, and great marsh evening primrose (*Oenothera elata hirsutissima*). Disturbed habitat occurs primarily at the northeastern edge of the campus in an area that had been heavily disturbed by illegal bicycle motocross (BMX) activities and creation of a track. This habitat also occurs in a large area in the southeast portion of campus near the existing parking lots. Altogether, disturbed habitat covers 5.2 acres on campus.

Eucalyptus Woodland

Eucalyptus woodlands typically are dense stands of gum tree (*Eucalyptus* spp.) with a closed canopy and little or no shrubby understory; however, they can be more open and include pockets of native vegetation in clearings. On campus, eucalyptus woodland occurs in the northeast corner along Fury Lane; near the center, along the northern edge of the developed portion; and, in a small patch at the western edge, near the greenhouse. In total, eucalyptus woodland covers 1.0 acre.

Non-native Vegetation

Non-native vegetation on campus contains a mixture of exotic pest species and ornamental plant species that have escaped cultivation and exist among native species. Species observed in the non-native vegetation include Peruvian pepper, Brazilian pepper (*Schinus terebinthifolius*), giant reed, and locust (*Robinia* sp.). Non-native vegetation occurs scattered on either side of the unnamed drainage in the southeast portion of the campus and in the southwest portion of the campus. This habitat type occupies 1.2 acres of the campus.

Developed

Developed land is that where either permanent structures and/or pavement have been placed or maintained landscaping occurs. The center of campus is entirely developed, although small unmaintained patches of bare earth and non-native vegetation occur along the perimeter and in pockets. The total developed area on campus is 93.2 acres.

3.6 FLORA

A total of 117 plant species have been recorded during surveys in 2001, 2003, 2013, and 2017 (Appendix A). Of these, 60 are native and 57 are non-native.

3.7 FAUNA

A total of 51 animal species, scat, bones, or burrows have been observed or otherwise detected on campus (Appendix B).

4.0 SENSITIVE BIOLOGICAL RESOURCES

4.1 SENSITIVE NATURAL COMMUNITIES

Sensitive natural communities generally include lands that support unique vegetation communities or the habitat of rare or endangered species or subspecies of animals or plants as defined by Section 15380 of the CEQA Guidelines. In the context of the MSCP, sensitive natural communities include Tier I through Tier III habitat types.

Of the 20 vegetation communities mapped on campus and included within Table 2, 13 are considered sensitive natural communities (Table 2).

Table 2
SENSITIVE NATURAL COMMUNITIES

VEGETATION COMMUNITY[1]	AREA[2] (acres)
Tier I[3]	
Arundo-dominated riparian (65100)	0.33
Freshwater marsh (52400)	0.05
Herbaceous wetland – disturbed phase (52510)	0.11
Maritime succulent scrub (32400)	0.3
Mule fat scrub (63310)	0.06
Southern arroyo willow riparian forest (61320)	2.26
Southern cottonwood-willow riparian forest (61330)	0.40
Southern riparian forest (61300)	0.16
Southern willow scrub (including disturbed phase; 63320)	0.85
Tier II	
Baccharis scrub (including sparse phase; 32000)	6.7
Diegan coastal sage scrub (including disturbed phase; 32500)	42.6
Tier III	
Non-native grassland (including broad-leaf dominated; 42200)	9.8
TOTAL	**63.62**

[1] Sensitive natural community names and codes are from Holland (1986) and Oberbauer (1996).
[2] Wetland acreage is provided to two decimal places and upland acreage to one decimal place.
[3] Vegetation communities within the MSCP study area are divided into four Tiers of sensitivity based on rarity and ecological importance. Tier I habitats are considered to be the most sensitive and Tier IV habitats are considered to be the least.

4.2 SPECIAL-STATUS SPECIES

Special-status species are those listed as threatened or endangered, proposed for listing, or candidates for listing by the USFWS; California State listed as threatened or endangered or considered sensitive by the CDFW; included in the County MSCP Subarea Plan as covered species, non-covered species, or narrow endemic; and/or, are California Native Plant Society (CNPS) List 1A, 1B, or 2 species, as recognized in the CNPS' Inventory of Rare and Endangered Vascular Plants of California (CNPS 2010) and consistent with the CEQA Guidelines. Rare plants acknowledged as being regionally sensitive by the County and/or having designation of CNPS List 4 may be considered special-status if significant populations could be affected by a proposed action.

4.2.1 Special-Status Plant Species

Special-status and rare plant species were analyzed for potential to occur on campus based on known distributions, habitat requirements, and existing conditions (Appendix C). Status codes are explained in Appendix E. County sensitivity is described in terms of MSCP given the take authorized and MSCP Hardline Preserve designations on campus. The CNDDB field forms for 2013 observations are included in Appendix F.

As depicted on Figure 5, two special-status plant species, Palmer's goldenbush (*Ericameria palmeri* ssp. *palmeri*) and San Diego marsh-elder (*Iva hayesiana*), have been observed on campus and are discussed below.

Palmer's goldenbush (*Ericameria palmeri* ssp. *palmeri*)
Listing: --/--; CNPS List 1B.1; MSCP Narrow Endemic
Distribution: Southern San Diego County and Baja California, Mexico below approximately 660 feet in elevation. Known in California from only six occurrences.
Habitat: This sizeable shrub grows along coastal drainages, in mesic chaparral sites, or rarely in Diegan coastal sage scrub. Occasionally occurs as a hillside element (usually at higher elevations inland on north-facing slopes).
Status on site: One individual of Palmer's goldenbush was observed on October 10, 2017 within the Diegan coastal sage scrub in the southwestern portion of the campus.

San Diego marsh-elder (*Iva hayesiana*)
Listing: --/--; CNPS List 2B.2; MSCP Non-Covered
Distribution: San Diego County; Baja California, Mexico
Habitat: Creeks of intermittent streambeds are preferred habitat for this low-growing, conspicuous shrub. Typically, the riparian canopy is open, allowing substantial sunlight to reach this marsh-elder. Sandy alluvial embankments with cobbles are frequently utilized.
Status on site: Fourteen individuals of San Diego marsh-elder were observed on October 10, 2017 within the Diegan coastal sage scrub in the southwestern portion of the campus.

In addition, one rare or uncommon plant species, San Diego sunflower (*Bahiopsis laciniata*) has been observed on campus and is depicted on Figure 5 and discussed below. Two additional rare or uncommon plant species have a moderate or high potential to occur (Appendix C).

San Diego sunflower (*Bahiopsis laciniata*)
Status: --/--; CNPS List 4.3; MSCP Non-Covered
Distribution: San Diego County and Baja California
Habitat: Diegan coastal sage scrub
Status on campus: More than 100 individuals of San Diego sunflower were observed on October 3, 2001 and over 400 individuals were observed on July 2003. These locations were confirmed in November 2013 and numbers of individuals were estimated at more than 500 total. This species occurs in association with the Diegan coastal sage scrub and maritime succulent scrub in the northern and western portions of the campus.

4.2.2 Special-Status Animal Species

Special-status animal species were analyzed for potential to occur on campus based on habitat requirements and species ranges (Appendix D). Status codes are explained in Appendix E. County sensitivity is described in terms of MSCP given the take authorized and MSCP Hardline Preserve designations on campus. CNDDB field forms for 2013 observations are included in Appendix F.

As depicted on Figure 5, six sensitive animal species have been observed on campus. These include the federally threatened coastal California gnatcatcher and five non-listed animal species that are

designated as California State species of special concern and/or are considered sensitive by the County. These species are discussed below. Several other special-status animals have a moderate or high potential to occur on campus (Appendix D).

Orange-throated whiptail (*Cnemidophorus hyperythrus beldingi*)
Status: --/CSC; MSCP Covered
Distribution: Southern Orange and southern San Bernardino (Colton) counties south to the cape of Baja.
Habitat: Coastal sage scrub, chaparral, edges of riparian woodlands and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny or shaded areas and abundant invertebrate prey base, particularly termites (*Reticulitermes* sp.).
Status on campus: A single orange-throated whiptail was observed along a trail on the edge of non-native grassland in the southeast portion of the District campus. It is likely that other orange-throated whiptails occupy undeveloped scrub and grassland habitat on campus.

Coastal whiptail (*Cnemidophorus tigris multiscutatus*)
Status: --/--; MSCP Non-Covered
Distribution: Ventura County south in cismontane California to south-central Baja.
Habitat: Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter and an abundance of invertebrate prey, particularly termites.
Status on campus: A single coastal whiptail was observed along a trail on the edge of non-native grassland in the southeast portion of the campus. It is likely that other coastal whiptails occupy undeveloped scrub and grassland habitat on campus.

Coastal California gnatcatcher (*Polioptila californica californica*)
Status: FT/CSC; MSCP Covered
Distribution: Southern Los Angeles, Orange, western Riverside, and San Diego counties south into Baja
Habitat: Coastal sage scrub
Status on campus: One gnatcatcher was observed in Diegan coastal sage scrub in the northeastern portion of campus during the general survey in 2001. Focused surveys for the gnatcatcher performed on a portion of campus in 2001 were negative. Gnatcatchers were heard in Diegan coastal sage scrub in the northwestern portion of campus during vegetation surveys in November 2013. One gnatcatcher was observed in coastal sage scrub in the southwestern portion of campus during the general survey in October 2017. This species has a high potential to use the undisturbed and California sage brush-dominated Diegan coastal sage scrub within the northern and western preserve areas on campus for breeding.

Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*)
Status: --/CSC; MSCP Covered
Distribution: Ventura County southeast through Los Angeles, Orange, Riverside, and San Diego counties to northwestern Baja.
Habitat: Coastal sage scrub, where it occurs on rocky hillsides and in canyons but also may be found in open sage scrub/grassy areas of successional growth (for example, after a fire).

Status on campus: A single southern California rufous-crowned sparrow was observed in Diegan coastal sage scrub in the western portion of the campus during the 2003 survey. This species has a high potential to use the open stages of undisturbed Diegan coastal sage scrub within the western preserve areas on campus for breeding.

Yellow warbler (*Dendroica petechia*)
Status: --/CSC; MSCP Non-Covered
Distribution: Throughout North America; a spring and summer breeding resident in southern California.
Habitat: Riparian areas throughout California. Primarily restricted to riparian woodland and riparian scrub habitats in southern California.
Status on campus: A single, transient yellow warbler was observed in the southern portion of the campus near the District's Water Conservation Garden during the 2003 survey. This area is currently developed and suitable habitat no longer exists. Yellow warbler could use the riparian habitat contained within preserve areas for breeding.

San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)
Status: --/CSC; MSCP Non-Covered
Distribution: Southern Santa Barbara County, south on the coastal slope to the vicinity of San Quintin, Baja. Localities on the eastern edge of its range include Jacumba and San Felipe Valley in San Diego County.
Habitat: Occurs primarily in open habitats including coastal sage scrub, chaparral, grassland, croplands, and open, disturbed areas if there is at least some scrub cover present.
Status on campus: San Diego black-tailed jackrabbit scat was observed in Diegan coastal sage scrub in the southwestern portion of the campus, and this species could occur elsewhere within undeveloped habitat on campus.

4.2.3 Nesting Birds

The federal Migratory Bird Treaty Act (MBTA) protects all common wild birds found in the United States except the house sparrow, starling, feral pigeon, and resident game birds such as pheasant, grouse, quail, and wild turkey. Resident game birds are managed separately by each state. The MBTA makes it unlawful for anyone to kill, capture, collect, possess, buy, sell, trade, ship, import, or export any migratory bird including feathers, parts, nests, or eggs. Further, Section 3503 of the California Fish and Game Code (CFG Code) makes it illegal to destroy any birds' nest or any birds' eggs that are protected under the MBTA. Section 3503.5 also protects all birds in the orders *Falconiformes* and *Strigiformes*, birds of prey, such as hawks and owls, and their eggs and nests from any form of take.

Undeveloped portions of campus are characterized by trees, shrubs, and other habitat that provide suitable nesting opportunities for a variety of common and sensitive bird species, including raptors, protected under the federal MBTA and CFG Code.

4.2.4 Raptor Foraging

In general, important raptor foraging areas are characterized by habitat types that are both compatible with foraging behavior (e.g., promote appropriate lines of sight, provide unobstructed access to prey, contain adequate perches, etc.) and support an adequate prey base for target raptors with the potential to range through the area. Typically, raptor foraging areas of local and regional importance are relatively large in size and are not fragmented or constrained by development or other incompatible land uses. For year-round resident raptors, important foraging areas may be used frequently and repeatedly, and usually occur in close proximity to nest locations and territories. Wintering raptors with the potential to occasionally range through an area may use multiple foraging sites less frequently along a migratory route or wintering location.

The northern and southern campus preserve areas provide the highest quality foraging habitat for a variety of raptor species with potential to forage over the local area, including species such as red-tailed hawk (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), great-horned owl (*Bubo virginianus*), and barn owl (*Tyto alba*), among others. These areas are characterized by undeveloped shallow slopes and sparse scrub, with optimal lines of sight and perch locations nearby. Riparian forest and adjacent scrub habitat located within campus preserve areas provide good quality foraging habitat for raptors such as Cooper's hawk (*Accipiter cooperii*) and red-shouldered hawk (*Buteo lineatus*). Grassland and scrub habitat located within take authorized areas in the eastern portions of campus are densely-vegetated and occur in proximity to developments, but provide marginal foraging habitat for raptors.

4.3 JURISDICTIONAL WATERS AND WETLANDS

In the context of this assessment, jurisdictional waters and wetlands include those resources regulated by the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the federal Clean Water Act (CWA); the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and State Porter-Cologne Water Quality Control Act; and, the CDFW pursuant to Sections 1600 *et seq.* of the California Fish and Game Code (CFG Code). Jurisdictional waters and wetlands also include MSCP Tier I wetland habitats, including vernal pools, alkali marsh, freshwater marsh, riparian forests, riparian woodlands, and riparian scrubs.

The approximate boundaries of potential jurisdictional waters and wetlands were preliminarily mapped during the 2013 surveys. Resources were identified in association with the unnamed drainage that traverses the eastern portions of the campus characterized by southern arroyo willow riparian forest, southern cottonwood-willow riparian forest, southern riparian forest, southern willow scrub, mule fat scrub, freshwater marsh, herbaceous wetland, tamarisk scrub, and Arundo-dominated riparian habitat types. A small stand of southern willow scrub presumably supporting wetland conditions was observed immediately south of the campus entrance. In addition, two unnamed drainage swales characterized by herbaceous wetland occur west of the riparian corridor. Several isolated stands of tamarisk scrub are located within upland areas that are not considered jurisdictional.

4.4 WILDLIFE CORRIDORS AND LINKAGES

Wildlife corridors connect otherwise isolated pieces of habitat and allow movement or dispersal of plants and animals. Local wildlife corridors allow access to resources such as food, water, and shelter within the framework of their daily routine. Regional corridors provide these functions over a larger scale and link two or more large habitat areas, allowing the dispersal of organisms and the consequent mixing of genes between populations. A corridor is a specific route that is used for the movement and migration of species, and may be different from a linkage in that it represents a smaller or narrower avenue for movement. A linkage is an area of land that supports or contributes to the long-term movement of animals and genetic exchange by providing live-in habitat that connects to other habitat areas. Many linkages occur as stepping-stone linkages that are comprised of a fragmented archipelago arrangement of habitat over a linear distance. Important corridors and linkages have been identified on a local and regional scale throughout the MSCP planning area in San Diego County. The planning objectives of most corridors and linkages in coastal San Diego County include establishing a connection between the northern and southern regional populations of the coastal California gnatcatcher, in addition to facilitating movement and connectivity of habitat for large mammals and riparian bird species.

The campus is generally surrounded to the north, east, and west by regional-scale development, including Rancho San Diego, Casa de Oro, Mount Helix, and Spring Valley, which are continuous with further suburban development in El Cajon, Lakeside, La Mesa, and San Diego. The immediate vicinity of the campus is also developed as residential and retail, except on the west and northwest sides, where the campus abuts undeveloped lands. These lands are separated from extensive undeveloped lands in the Sweetwater River and surrounding hillsides to the south and southeast by Campo Road (Figure 3). Thus, the undeveloped portions of the campus represent part of a pocket of open space at the northern periphery of more extensive undeveloped lands to the south, but separated from them by a major arterial street. This pocket provides no connectivity to open space other than limited access to those to the south across Campo Road. The undeveloped land on campus is unlikely to facilitate movement of larger mammals due to fragmentation of habitat in the local area and existing disturbances. The undeveloped land in the north and northwest portions of campus could facilitate migration and dispersal functions for bird species, such as the coastal California gnatcatcher.

4.5 CAMPUS PRESERVE AREAS

Since the HLP was issued by the County in 1994 and the MSCP Hardline Preserve and take authorized designations went into effect, the District has respected MSCP Hardline Preserve boundaries and has restricted development to take authorized areas on campus. The District has further designated additional preserve areas on campus through their land use planning objectives, which encompass additional high-quality upland and wetland/riparian habitat on campus.

Altogether, areas formally and informally designated as preserve areas on campus currently include the following undeveloped lands:

- MSCP Hardline Preserve established pursuant to the District's 1994 HLP;
- Additional upland habitat outside of, but contiguous with, the MSCP Hardline Preserve; and
- Additional wetland and riparian corridor habitat associated with an unnamed drainage feature that traverses the eastern portion of the campus.

The campus preserve areas are depicted on Figure 5 and summarized within Table 3. The status of HLP requirements pertaining to preservation of coastal sage scrub on campus is as follows:

- 45.7 acres of coastal sage scrub habitat types (including disturbed and subtypes) have been preserved within the campus preserve areas; and

- 3.3 acres of disturbed non-native upland habitat types serve as potential candidates for ongoing restoration and conversion to coastal sage scrub habitat within the campus preserve areas. At least 1.8 acres of restoration to coastal sage scrub is required to meet the 47.5-acre target established by the HLP.

The take authorized areas south of Rancho San Diego Parkway in the extreme eastern portion of campus were previously considered for addition to the campus preserve concept during Master Plan efforts in 2004; however, the District did not move forward with this proposal and never implemented the Master Plan projects for which the inclusion would have served as mitigation. Therefore, these areas remain take authorized outside of campus preserve areas and available for Master Plan project development.

Table 3
VEGETATION COMMUNITIES WITHIN CAMPUS PRESERVE AREAS

VEGETATION COMMUNITY	TOTAL CAMPUS (ACRES)	MSCP HARDLINE PRESERVE (ACRES)	ADDITIONAL PRESERVE (ACRES)	TOTAL CAMPUS PRESERVE AREAS (ACRES)
Scrub Habitat Types				
Diegan coastal sage scrub (32500)	41.2	38.5	2.7	41.2
Diegan coastal sage scrub – disturbed (32500)	1.4	1.3	0.1	1.4
Baccharis scrub (32000)	6.7	2.6	0.2	2.8
Maritime succulent scrub (32400)	0.3	0.3	--	0.3
Subtotal	**49.6**	**42.7**	**3.0**	**45.7**

Table 3 (cont.)
VEGETATION COMMUNITIES WITHIN CAMPUS PRESERVE AREAS

VEGETATION COMMUNITY	TOTAL CAMPUS (ACRES)	MSCP HARDLINE PRESERVE (ACRES)	ADDITIONAL PRESERVE (ACRES)	TOTAL CAMPUS PRESERVE AREAS (ACRES)
Wetland and Riparian Habitat Types				
Freshwater marsh (52400)	0.05	-	0.04	0.04
Herbaceous wetland (52510)	0.11	-	0.03	0.03
Southern riparian forest (61300)	0.16	0.16	--	0.16
Southern arroyo willow riparian forest (61320)	2.26	0.49	1.21	1.7
Southern cottonwood willow riparian forest (61330)	0.40	0.40	--	0.40
Mule fat scrub (63310)	0.06	-	0.04	0.04
Southern willow scrub (63320)	0.85	0.36	0.07	0.43
Tamarisk scrub (63810)	0.58	0.16	0.05	0.21
Arundo-dominated riparian (65100)	0.33	0.06	0.13	0.19
Subtotal	**4.80**	**1.63**	**1.57**	**3.20**
Other Upland Habitat Types				
Non-native vegetation (11000)	1.2	0.02	0.001	0.021
Eucalyptus woodland (11100)	1.0	0.3	--	0.3
Disturbed habitat (11300)	5.2	0.8	--	0.8
Non-native grassland (42200)	9.8	1.6	0.6	2.2
Subtotal	**17.1**	**2.7**	**0.6**	**3.3**
Developed (12000)	93.2	0.8	0.04	0.8
TOTAL	**164.8**	**47.83**	**5.21**	**53.04**

Overall, the campus preserve areas are currently in good condition. Multiple trails run through the preserve areas, some of which are a cross-country running course that existed prior to the HLP. Relatively easy access into the northern preserve areas from Fury Lane has resulted in disturbances beyond those caused by the passive recreational activities allowed by the MSCP (e.g., walking, running, hiking, bird watching). In past years, off-road BMX bike riding resulted in regular disturbance to a portion of the northern preserve areas adjacent to Fury Lane. This area was the subject of a previous restoration effort by the District that had not succeeded due to intense and ongoing off-road bicycle activity. The confluence of three trails south of this location created another patch of disturbed habitat. Another area north of Rancho San Diego Parkway that was previously restored has been impacted by human activity to the point that parts of it no longer support coastal sage scrub vegetation. However, enforcement and protection efforts by the District in 2013 have resulted in a stop to off-road bicycle activities and encroachment in these areas. Further, the areas are once again in active restoration by the District as part of their ongoing commitment to fulfill their HLP obligations. The District, Cuyamaca Community College biology faculty members, and the District's biological consultant are implementing community outreach, notification, signage, and restoration measures in these areas. The District met with the community and notified them that the encroachment is not permitted. Signage has been installed and plans have been prepared to remove the mounds of dirt comprising the BMX course and restore the area back to native habitat. Implementation of the restoration measures are underway and will be

followed by active management, including maintenance and monitoring to ensure success of the restoration efforts. No evidence of BMX use was observed during the October 2017 survey.

5.0 REGULATORY FRAMEWORK

The District is the Lead Agency on the CEQA document for the proposed Master Plan project. As Lead Agency, the District's Governing Board will be responsible for certifying the CEQA document and deciding on the Master Plan itself. The Supplemental EIR and this biological resource analysis are a programmatic review of the Master Plan implementation as a whole. The District's Governing Board must approve each development project identified in the Master Plan individually prior to construction. As subsequent projects move forward through the planning and design process, the District will determine their consistency with the Master Plan and this analysis.

In addition to CEQA requirements, impacts to biological resources are subject to federal, State, and local regulations, as discussed below.

5.1 FEDERAL

Administered by the USFWS, the ESA provides the legal framework for the listing and protection of species that are identified as being endangered or threatened with extinction. Actions that jeopardize such species and their habitats are considered a "take" under the federal ESA. Section 9(a) of the ESA defines take as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct." "Harm" and "harass" are further defined in federal regulations and case law to include actions that adversely impair or disrupt a listed species' normal behavioral patterns. The USFWS identifies critical habitat for endangered and threatened species. Critical habitat is defined as areas of land considered necessary for endangered or threatened species to recover. The ultimate goal is to restore healthy populations of listed species within their native habitat so they can be removed from the list of threatened or endangered species. Once an area is designated as critical habitat pursuant to the ESA, all federal agencies must consult with the USFWS to ensure that any action they authorize, fund, or carry out is not likely to result in destruction or adverse modification of the critical habitat.

Section 4(d) of the ESA regulates actions that could jeopardize endangered or threatened species. A special rule under Section 4(d) of the ESA authorizes "take" of certain protected species under approved Natural Communities Conservation Programs, which are administered by the states. Sections 7 and 10(a) of the federal ESA regulate actions that could harm or harass endangered or threatened species. Section 10(a) allows issuance of permits for "incidental" take of endangered or threatened species. The term "incidental" applies if the taking of the listed species is secondary to, and not the purpose of, an otherwise lawful activity. A conservation plan demonstrating how the take will be minimized and what steps taken would ensure the listed species' survival must be submitted for the issuance of Section 10(a) permits. Section 7 describes a process of federal interagency consultation for use when federal actions may adversely affect listed species. A biological assessment is required for any major activity if it may affect listed species. The adopted County MSCP Subarea Plan provides take authorization under Section 10(a).

Migratory bird species native to the United States or its territories are protected under the federal MBTA, as amended under the Migratory Bird Treaty Reform Act of 2004 (FR Doc. 05-5127). The MBTA is generally protective of migratory birds but does not actually stipulate the type of protection required. In common practice, the MBTA is now used to place restrictions on disturbance of active bird nests during the nesting season (generally January 15 to September 15). In addition, the USFWS commonly places restrictions on disturbances allowed near active raptor nests.

Federal wetland regulation is guided by the CWA. The purpose of the CWA is to restore and maintain the chemical, physical, and biological integrity of all waters of the U.S. Permitting for projects filling waters of the U.S. (including wetlands) is overseen by the USACE under Section 404 of the CWA. In addition, when a Section 404 permit is required, a CWA Section 401 Water Quality Certification is also required from the RWQCB. For projects not requiring a Section 401 Water Quality Certification, the RWQCB may elect to regulate waters of the State under the Porter-Cologne Act.

5.2 STATE

CEQA and its implementing guidelines (State CEQA Guidelines) require that discretionary projects be reviewed in accordance with its provisions. Mitigation for significant impacts to the environment is determined through the CEQA environmental review process in accordance with existing laws and regulations.

CFG Code regulates species listed as threatened or endangered under the California endangered species act (CESA). CESA is similar to the ESA in that it contains a process for listing of species and regulating potential impacts to listed species. CESA authorizes that [p]rivate entities may take plant or wildlife species listed as endangered or threatened under ESA and CESA, pursuant to a federal incidental take permit (ITP) issued in accordance with Section 10 of the ESA, if the CDFW certifies that the incidental take statement (ITS) or ITP is consistent with CESA (Fish and Game Code Section 2080.1(a)). Section 2081(b) and (c) of the CESA allows CDFW to issue an ITP for a state-listed threatened and endangered species only if specific criteria are met. These criteria can be found in Title 14 CCR, Sections 783.4(a) and (b). No Section 2081(b) permit may authorize the take of "fully protected" species and "specified birds." If a project is planned in an area where a fully protected species or specified bird occurs, an applicant must design the project to avoid all take; the CDFW cannot provide take authorization under CESA. In addition, the state's NCCP Guidelines (CDFW 1997), or an adopted regional/local NCCP plan, provide take authorization for projects conforming thereto. California's NCCP focuses largely on conserving large areas of coastal sage scrub and the habitats that link those areas. The adopted County MSCP Subarea Plan was prepared pursuant to Section 2081 of the CESA and the County was issued an umbrella Section 2081 ITP from the CDFW authorizing take of multiple state listed species.

The NCCP Act is designed to conserve habitat-based natural communities at the ecosystem scale while accommodating compatible land uses in coordination with CESA. CDFW is the principal state agency implementing the NCCP Program. The Act established a process to allow for comprehensive, long-term, regional, multi-species, and habitat-based planning in a manner that satisfies the requirements of the state and ESAs (through a companion regional habitat

conservation plan). The NCCP program has provided the framework for innovative efforts by the state, local governments, and private interests, to plan for the protection of regional biodiversity and the ecosystems upon which they depend. NCCPs seek to ensure the long-term conservation of multiple species, while allowing for compatible and appropriate economic activity to proceed. The adopted County MSCP Subarea Plan was prepared as part of the MSCP subregional planning pursuant to the NCCP Act.

On private property, endangered plants may also be protected by the Native Plant Protection Act (NPPA) of 1977. The NPPA regulates collection, transport, and commerce in listed plants. The CESA followed NPPA and covers both plants and animals determined to be endangered or threatened with extinction. Plants listed as rare under NPPA were designated rare under the CESA.

Section 1602 of the CFG Code requires any person, state, or local governmental agency to provide advance written notification to CDFW prior to initiating any activity that would: (1) divert or obstruct the natural flow of, or substantially change or remove material from the bed, channel, or bank of any river, stream, or lake; or (2) result in the disposal or deposition of debris, waste, or other material into any river, stream, or lake. The State definition of "lakes, rivers, and streams" includes all rivers or streams that flow at least periodically or permanently through a bed or channel with banks that support fish or other aquatic life, and watercourses with surface or subsurface flows that support or have supported riparian vegetation.

CFG Code Sections 3503, 3503.5, and 3800 prohibit the take or possession of birds, their nests, or eggs. Disturbance that causes nest abandonment and/or loss of reproductive effort (i.e., killing or abandonment of eggs or young) is considered a take. Such a take would also violate federal law protecting migratory birds. ITPs are required from the CDFW for projects that may result in the incidental take of species listed by the state as endangered, threatened, or candidate species.

The Porter-Cologne Water Quality Control Act provides for Statewide coordination of water quality regulations. The Act established the California State Water Resources Control Board (SWRCB) as the Statewide authority and nine separate RWQCBs to oversee smaller regional areas within the State. The Act authorizes the SWRCB to adopt, review, and revise policies for all waters of the State (including both surface and ground waters); and directs the RWQCBs to develop regional Basin Plans. Section 13170 of the California Water Code also authorizes the SWRCB to adopt water quality control plans on its own initiative. The Basin Plan for the San Diego Region is designed to preserve and enhance the quality of water resources in the San Diego region for the benefit of present and future generations. The purpose of the plan is to designate beneficial uses of the region's surface and ground waters, designate water quality objectives for the reasonable protection of those uses, and establish an implementation plan to achieve the objectives.

5.3 LOCAL

The County MSCP Subarea Plan, adopted under the NCCP, provides the County with the ability to issue take authorizations for federal and state listed sensitive species to projects that conform to the MSCP Subarea Plan and its implementation regulations (Biological Mitigation Ordinance [BMO]; County 2010). In 1994, while the County was in the process of MSCP planning and interim NCCP status, the District obtained a HLP from the County and in consultation with the

USFWS for take of coastal sage scrub occupied by the federally-threatened coastal California gnatcatcher within campus property. The HLP identified portions of the campus that were take authorized and portions that were to be preserved as MSCP Hardline Preserve for the County MSCP Subarea Plan. The District entered into negotiations with the County and Wildlife Agencies (i.e., USFWS and CDFW) to establish MSCP Hardline Preserve designation over undeveloped land on campus. Projects put forth by the District on campus that are found to be in conflict with the 1994 HLP provisions or have an effect on designated MSCP Hardline Preserve would be subject to discretionary review by the County and Wildlife Agencies.

Adjustments to the County MSCP Subarea Plan MSCP Hardline Preserve boundaries may be made in limited circumstances. Such adjustments require concurrence of the USFWS and CDFW. Public notice and an opportunity to comment are also required where the County will exercise its discretionary authority in making an adjustment. Any proposed modifications to MSCP Hardline Preserve would require the District to request approval from the County and Wildlife Agencies for a boundary line adjustment. Approval of the boundary line adjustment would require that certain findings are made by the County and Wildlife Agencies with respect equivalent or superior preservation of resources as a result of the MSCP Hardline Preserve modification.

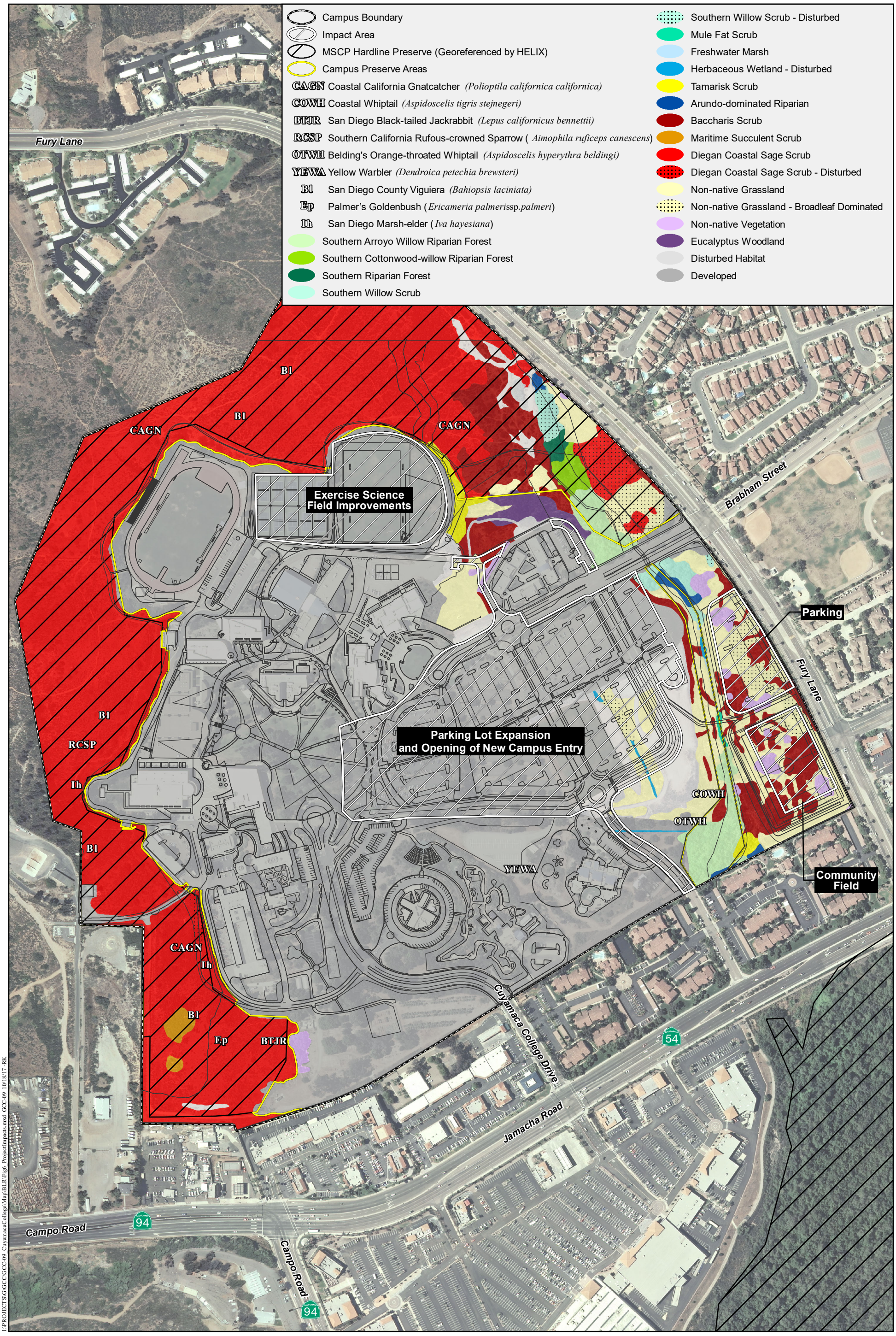
6.0 PROJECT EFFECTS

Generally, the construction projects proposed in the Master Plan are the replacement and renovation of existing facilities within the developed (and take authorized) portion of campus. Implementation of those projects would not directly affect biologically sensitive areas of campus described herein. As depicted on Figure 6 and Table 4, however, several Master Plan projects not evaluated in the 2004 Final EIR were determined to have the potential to impact biological resources, thus warranting analysis in the Addendum and in this report.

Table 4
MASTER PLAN PROJECTS WITH POTENTIAL TO IMPACT BIOLOGICAL RESOURCES

MASTER PLAN PROJECT	AREA (acres)
Parking Lot Expansion and New Campus Entry	21.9
Exercise Science Field Improvements	5.9
Community Field Relocation and Improvements	4.0
TOTAL	**31.8**

In addition, several pedestrian trails are conceptually planned within the campus to provide access between various facilities. In particular, two pedestrian trails are planned to traverse portions of campus preserve areas, including one trail in the northern portion of campus extending east from the existing campus practice field, and another connecting the proposed parking lot expansion with the proposed community field in the eastern portion of campus. The District has committed to designing future trails on campus within the footprint of existing trails and within areas that lack sensitive biological resources.



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Master Plan Impacts

CUYAMACA COLLEGE 2013 FACILITIES MASTER PLAN UPDATE

HELIX Environmental Planning

N 0 350 Feet

Figure 6

The analysis assumes a worst-case assessment of the potential impacts of the individual Master Plan projects listed above. Locations for Master Plan projects are conceptual and do not reflect final engineering design. Therefore, once detailed design information for each project is produced during the latter stages of campus development, additional measures could be integrated into the design to avoid and/or minimize effects on sensitive biological resources.

Impacts addressed in this section are considered either direct or indirect. A direct impact occurs when the primary effects of the project replace existing habitat with graded or developed areas. An indirect impact consists of secondary effects of a project such as exotic species invasion and increased lighting, noise, and human intrusion. The magnitude of an indirect impact can be the same as a direct impact; however, the effect usually takes a longer time to become apparent.

6.1 DIRECT IMPACTS

As currently planned, construction of several Master Plan projects would result in direct impacts to biological resources. Potential construction-related impacts are addressed below for the following issue areas: sensitive natural communities, special-status species, jurisdictional waters and wetlands, wildlife corridors and linkages, and MSCP Hardline Preserve.

Operation of Master Plan projects would not be expected to result in any direct impacts to biological resources. Operation activities would be contained within impact footprints and existing campus developments that lack biological resources and are within the "take authorized" portion of campus. Potential indirect impacts of Master Plan project operation are addressed in Section 6.2.

6.1.1 Sensitive Natural Communities

The 2004 Final EIR concluded that potential construction of new facilities to the full extent of the proposed Master Plan would directly and significantly impact eight sensitive vegetation communities on site, including 0.03 acre of southern arroyo willow riparian forest, 0.17 acre of southern cottonwood willow riparian forest, 0.09 acre of southern willow scrub, 0.03 acre of freshwater marsh, 0.18 acre of tamarisk scrub, 2.3 acres of Diegan coastal sage scrub (including disturbed), 2.5 acres of baccharis scrub, and 5.3 acres of non-native grassland.

As currently planned, the large majority of Master Plan project impacts would be restricted to disturbed and developed lands that lack sensitive natural communities and are located within the "take authorized" portion of the campus. However, construction of the parking lot expansion, community field relocation and improvements, and pedestrian trails could result in direct impacts and the permanent loss of the following sensitive natural communities located on campus: herbaceous wetland (0.05 acre), southern arroyo willow riparian forest (0.01 acre), southern willow scrub (0.01 acre), baccharis scrub (1.5 acres), and non-native grassland (3.0 acres). Table 5 provides a summary of impacts to sensitive natural communities.

The current Master Plan projects would result in substantially reduced impacts to wetland and riparian sensitive natural communities as compared to the 2004 Master Plan (up to 0.07 acre for current Master Plan projects versus 0.32 acre before). Thus, the proposed impacts are consistent with the 2004 Final EIR and not a new significant impact. As also addressed below within

Section 6.1.3, these sensitive communities also support potential jurisdictional resources and require permitting with the USACE, RWQCB, and/or CDFW. As currently laid out in the Master Plan, the parking lot expansion and new campus entry could result in impacts to wetland and riparian sensitive natural communities, including 0.05 acre of herbaceous wetland (Tier I), 0.01 acre of southern arroyo willow riparian forest (Tier I), and 0.01 acre of southern willow scrub (Tier I) located outside of campus preserve areas and outside of MSCP Hardline Preserve, detailed as follows. The western portion of the parking lot expansion component for this Master Plan project is conceptually planned at the location of an unnamed drainage swale that supports herbaceous wetland habitat. As currently planned, approximately 0.04 acre of herbaceous wetland would be impacted at this location. The new campus entry is conceptually planned at the location of another unnamed drainage swale; as currently planned, approximately 0.01 acre of herbaceous wetland would be impacted at this location. In addition, the northern portion of the parking lot expansion component is conceptually planned within low quality riparian forest and scrub habitat. As depicted on Figure 6, the parking lot expansion clips the outermost edge of two riparian stands, including 0.01 acre of southern arroyo willow riparian forest and 0.01 acre of southern willow scrub.

Impact areas shown in the figure are programmatic and based on conceptual locations for Master Plan projects; in all likelihood, the District would avoid the wetland impacts during the engineering design process for the parking lot expansion and campus entry. Areas mapped as wetland habitat may or may not support wetland conditions as defined by the USACE or other agencies, and a formal jurisdictional delineation will be required to determine actual jurisdictional status and limits of the mapped features. Impact values of this magnitude (i.e., 0.01 acre) in areas that occur immediately adjacent to existing developed land likely over-represent ultimate impact footprints. The District has committed to avoiding sensitive wetland and riparian habitat where feasible through project design. For the parking lot expansion, impact areas would be restricted to the existing developed land or uplands within "take authorized" areas. In the event that avoidance is not feasible, however, measures are proposed to fully compensate the potential loss of wetland and riparian habitat, in addition to preparing necessary plans and acquiring permits for impacts to jurisdictional habitat.

Impacts to upland sensitive natural communities located within "take authorized" portions of the campus would be considered less than significant and would not require compensatory mitigation. This includes 1.5 acres of impacts to baccharis scrub (Tier II) and 3.0 acres of impacts to non-native grassland (Tier III) resulting from the parking lot expansion and community field relocation and improvement. The District has already received coverage for take of upland habitat in these areas and has mitigated impacts through preservation measures on campus, in accordance with the 1994 HLP.

Table 5
MASTER PLAN PROJECT IMPACTS TO SENSITIVE NATURAL COMMUNITIES

SENSITIVE NATURAL COMMUNITY[1]	EXISTING (ACRES)[2]	IMPACTS WITHIN TAKE AUTHORIZED AREAS (acres)	IMPACTS WITHIN CAMPUS PRESERVE AREAS (acres)	MITIGATION RATIO*	MITIGATION REQUIRED** (acres)
Tier I[3]					
Herbaceous wetland (52510)	0.11	0.05	--	3:1	0.15
Southern arroyo willow riparian forest (61320)	2.26	0.01	--	3:1	0.03
Southern willow scrub (63320)	0.85	0.01	--	3:1	0.03
Tier II					
Baccharis scrub (32000)	6.7	1.5	--	2:1	--
Tier III					
Non-native grassland (including broad-leaf-dominated; 42200)	9.8	3.0	--	1.5:1	--
TOTAL	**19.72**	**4.5**	**--**	**--**	**0.21**

[1] Community names and codes are from Holland (1986) and Oberbauer (1996).

[2] Wetland acreage is provided to two decimal places and upland acreage to one decimal place. Sensitive vegetation communities with no proposed impacts are not included in this table.

[3] Vegetation communities within the MSCP study area are divided into four Tiers of sensitivity based on rarity and ecological importance. Tier I habitats are considered to be the most sensitive and Tier IV habitats are considered to be the least.

[4] Impacts to this upland habitat type are covered because they are located within take authorized portions of campus.

[*] Mitigation ratios provided are based on MSCP and Attachment M of the County's BMO. Ratios assume that criteria for biological resources core area are met. Mitigation ratios would not apply to impacts to upland habitat located within take authorized portions of campus. Specific mitigation for impacts to wetlands would be determined during permitting with the USACE, RWQCB, and/or CDFW. Specific mitigation for impacts to upland habitat located within MSCP Hardline Preserve would be determined in consultation with the County, USFWS, and/or CDFW.

[**] Mitigation required after ratio is applied. Mitigation would not apply to impacts to upland habitat located within take authorized portions of campus.

6.1.2 Special-Status Species

Special-Status Plant Species

The 2004 Final EIR concluded that impacts to special status plant species, specifically the San Diego sunflower, would be less than significant. Since then, two additional special-status plant species have been observed during surveys, both within the campus preserve. Master Plan projects are planned primarily within existing developed land and non-native or disturbed habitat types that do not provide suitable conditions for special-status plant species known to the region. Therefore, no impacts to special-status plant species are expected to occur. A brief discussion is provided below for special-status, rare or uncommon plants.

Palmer's goldenbush, a CNPS List 1B.1 plant species listed as a Narrow Endemic under the County MSCP Subarea Plan, was determined to occur at one location within the campus preserve areas (Figure 5). This species is identified as a County List B plant. It has a relatively limited distribution and is fairly uncommon, but is not presently listed as threatened or endangered. As depicted on Figure 6, none of the Master Plan projects are planned to occur in the vicinity of the known Palmer's goldenbush location on campus. Therefore, no impacts to this species would be expected to occur. No mitigation is required and the population of this species on campus is considered adequately protected due to its location within campus preserve areas.

San Diego marsh-elder, a CNPS List 2B.2 plant species that is not covered under the County MSCP Subarea Plan, was determined to occur at two locations within the campus preserve areas (Figure 5). This species is identified as a County List B plant. It has a relatively limited distribution and is fairly uncommon, but is not presently listed as threatened or endangered. As depicted on Figure 6, none of the Master Plan projects are planned to occur in the vicinity of known marsh-elder concentrations on campus. Therefore, no impacts to this species would be expected to occur. No mitigation is required and populations of this species on campus are considered adequately protected due to their location within campus preserve areas.

San Diego sunflower, a CNPS List 4.3 plant species that is not covered under the County MSCP Subarea Plan, was determined to occur at multiple locations within the campus preserve areas (Figure 5). This species is identified as a County List D plant. It has a relatively limited distribution and is fairly uncommon, but is not presently identified as rare, threatened, or endangered. As depicted on Figure 6, none of the Master Plan projects are planned to occur in the vicinity of known sunflower concentrations on campus. Therefore, no impacts to this species would be expected to occur. No mitigation is required and populations of this species on campus are considered adequately protected due to their location within campus preserve areas.

Two additional rare or uncommon plants were determined to have a moderate or high potential to occur within the coastal sage scrub on campus, although neither has been observed during surveys. Graceful tarplant (*Holocarpha virgata* ssp. *elongata*) and ashy spike-moss (*Selaginella cinerascens*) are CNPS List 4.2 plant species that are not covered under the County MSCP Subarea Plan. They are identified as List D plants by the County, having relatively limited distribution and not presently considered rare, threatened or endangered. Impacts to potential habitat for both of these species would be limited on campus. Impact areas would not be expected to support a critical population or substantial number of either the Graceful tarplant or ashy spike-moss. High quality coastal sage scrub habitat that is suitable for both species has been conserved within campus preserve areas. Therefore, potential impacts to these non-listed rare plants would be considered less than significant and no mitigation would be required. Impacts to special status plant species remain less than significant, as they were in 2004.

Special-Status Animal Species

The 2004 Final EIR concluded that impacts to sensitive animal species habitat would be less than significant because the California gnatcatcher, orange-throated whiptail, and southern California rufous-crowned sparrow are covered species under the MSCP and the site is considered take authorized under the MSCP; however, noise impacts during the breeding season could be

significant. Several special-status animal species have been observed or identified as having a moderate or high potential to occur on campus, primarily within undeveloped campus preserve areas. Master Plan projects are planned mostly within existing developed land and non-native or disturbed habitat types within "take authorized" portions of the campus that do not provide suitable conditions for special-status animal species known to the region. However, portions of the parking lot expansion, community field relocation and improvements, and pedestrian trails are planned on and in the immediate vicinity of habitat that could support special-status animal species. Therefore, direct impacts could occur. These impacts would be considered significant.

Two listed special-status species have been observed or identified as having a moderate or high potential to occur on campus: coastal California gnatcatcher and least Bell's vireo (*Vireo bellii pusillus*). In addition, a single, non-listed and California State fully-protected species was determined to have a moderate potential to occur on campus: white-tailed kite (*Elanus leucurus*). Last, 17 non-listed California State species of special concern and/or County sensitive species have been observed or were determined to have a moderate or high potential to occur on campus: orange-throated whiptail, coastal whiptail, red-diamond rattlesnake (*Crotalus ruber ruber*), San Diego ringneck snake (*Diadophis punctatus similis*), Coronado skink (*Eumeces skiltonianus interparietalis*), San Diego horned lizard (*Phrynosoma coronatum blainvillii*), coastal rosy boa (*Lichanura trivirgata roseofusca*), western patch-nosed snake (*Salvadora hexalepis virgultea*), Cooper's hawk (*Accipiter cooperii*), southern California rufous-crowned sparrow, grasshopper sparrow (*Ammodramus savannarum*), Bell's sage sparrow (*Amphispiza belli belli*), red-shouldered hawk (*Buteo lineatus*), yellow warbler, California horned lark (*Eremophila alpestris actia*), yellow-breasted chat (*Icteria virens*), and San Diego black-tailed jackrabbit. Potential impacts to these species are addressed in detail below.

Direct impacts to active nests of special-status bird species, regardless of MSCP coverage and location of impacts within "take authorized" areas on campus, would be considered significant and are addressed further below for nesting birds protected under the MBTA and CFG Code.

Listed and Fully-Protected Animal Species

Coastal California Gnatcatcher

The coastal California gnatcatcher is a federally listed threatened species and California State species of special concern. It is a covered species under the County MSCP Subarea Plan. Gnatcatcher has been previously observed on campus and is presumed to occupy the high-quality Diegan coastal sage scrub habitat within northern campus preserve areas that are setback from existing developments. Specifically, these areas include high quality scrub north and west of the existing athletic fields on campus. Gnatcatcher was also incidentally observed in the Diegan coastal sage scrub in the southwestern campus preserve area during the October 2017 general survey. Master Plan project impacts to gnatcatcher and its (upland) habitat within "take authorized" portions of the campus are covered under the 1994 HLP issued to the District. "Take authorized" portions of the campus consist of the areas outside of the designated MSCP Hardline Preserve depicted on Figure 6. The District has coverage for take of potential gnatcatcher habitat in these areas and has fully mitigated the loss of habitat through preservation measures on campus, as discussed in Section 4.5 of this report. Loss of potential habitat in take authorized areas would

be considered less than significant and no additional compensatory mitigation should be required. Avoidance and minimization measures consistent with the 2004 Final EIR are proposed to ensure that construction activities within "take authorized" areas avoid direct impacts to gnatcatcher individuals.

Least Bell's Vireo

The least Bell's vireo is a federally and California State listed endangered species. It is a covered species and rare, narrow endemic under the County MSCP Subarea Plan. Although vireo has not been previously observed or otherwise detected on campus, suitable riparian scrub and forest habitat occurs in association with the unnamed drainage feature that traverses the eastern portions of campus and contained within preserve areas. This habitat is of relatively low quality. The potential for vireo to breed within the habitat is moderate at best due to a high percentage of non-native vegetation; relatively open understory; sparse, fragmented, and narrow riparian stands; and, high levels of disturbance and proximity to existing development and heavily travelled roads. Nevertheless, the habitat is considered to be suitable and the status of vireo on campus is not known. Impacts to vireo and its habitat within the campus, including take authorized areas, would not be covered under the District's HLP and would be considered significant.

As currently planned, an extremely limited portion of the parking lot expansion project is conceptually located within low quality riparian habitat immediately adjacent to the existing campus development and outside of campus preserve areas. As depicted on Figure 6, the extremities of the northernmost driveway and parking lot components of this Master Plan project clip the outermost edge of two riparian stands, including 0.01 acre of southern arroyo willow riparian forest and 0.01 acre of southern willow scrub. These low-quality impact areas are not likely to support nesting vireo due to their extremely small size and adjacency with campus developments. Therefore, direct impacts to least Bell's vireo are not expected to occur at these locations. Further, impact areas shown are programmatic and based on conceptual locations for Master Plan projects. Impact values of this magnitude (i.e., 0.01 acre) in areas that occur immediately adjacent to existing developed land likely over-represent ultimate impact footprints. As discussed in the 2004 Final EIR, the District has committed to avoiding sensitive wetland and riparian habitat where feasible through project design. For the parking lot expansion project, impact areas would likely be restricted to the existing developed land or uplands within take authorized areas. Therefore, direct impacts to least Bell's vireo are not expected to occur. However, if impacts cannot be avoided through project design, the loss of riparian habitat potentially suitable for the species would be considered significant. Measures would be implemented by the District to fully compensate the loss of riparian habitat with the potential to be occupied by the least Bell's vireo, in addition to preparing necessary plans and acquiring permits for impacts to jurisdictional habitat.

White-Tailed Kite

The white-tailed kite is not federally or State listed as endangered or threatened, but is designated as a State fully-protected species. It is not a covered species under the County MSCP Subarea Plan. This species has a moderate potential to nest within the more mature stands of riparian habitat on campus that are setback from existing developments. This includes stands of riparian forest in the

northern and eastern portions of the campus preserve areas. Impacts to this fully-protected species cannot be authorized by the USFWS, CDFW, or County and would be considered significant.

As currently planned, none of the Master Plan projects would result in direct impacts to mature riparian habitat that could be used by nesting white-tailed kite. Therefore, no direct impacts to the species or its nesting habitat are expected to occur. Nevertheless, avoidance measures would be implemented by the District consistent with the 2004 Final EIR to prevent potential inadvertent impacts to this and other nesting bird species as a result of Master Plan project construction.

Non-Listed Sensitive Animal Species

As currently planned, the proposed parking lot expansion and community field relocation and improvement Master Plan projects could result in impacts to non-listed sensitive animal species with potential to occur. None of the non-listed sensitive animals with potential to occur have been previously observed or otherwise detected within the proposed impact areas. Potential impacts and loss of habitat within take authorized areas for non-listed sensitive animal species that are covered under the MSCP would be considered less than significant. This includes orange-throated whiptail, coastal whiptail, southern California rufous-crowned sparrow, San Diego horned lizard, and Cooper's hawk. The District has already fully mitigated the loss of upland habitat for these species through preservation measures on campus. As mentioned above, direct impacts to active nests of bird species, including non-listed sensitive birds would be considered significant and are addressed further below for nesting birds protected under the MBTA and CFG Code.

Two non-listed sensitive riparian bird species were determined to have the potential to occur within riparian habitat on campus: yellow warbler and yellow-breasted chat. These two species have the highest potential to use larger, contiguous stands of more developed riparian forest and scrub that occurs on campus. As discussed above for least Bell's vireo, a limited portion of the parking lot expansion is conceptually located within low quality riparian habitat immediately adjacent to existing campus development. As currently planned, this Master Plan project clips the outermost edge of two riparian stands, including 0.01 acre of southern arroyo willow riparian forest and 0.01 acre of southern willow scrub. Similar to that proposed for vireo, these low-quality impact areas are not likely to support nesting yellow warbler or yellow-breasted chat due to their extremely small size and adjacency with campus development. Therefore, direct impacts to these species are not expected to occur at these locations. Further, as discussed in the 2004 Final EIR, the District has committed to avoiding sensitive wetland and riparian habitat where feasible through project design. Impact areas would be restricted to the existing developed land or uplands within take authorized areas. Therefore, direct impacts to yellow warbler and yellow-breasted chat, and potential habitat for these two species, is not expected to occur.

Nesting Birds

The 2004 Final EIR concluded that any construction activity within 500 feet of an active raptor nest (300 feet for a Cooper's hawk nest), or 500 feet of an active coastal California gnatcatcher nest, would be considered significant. Undeveloped portions of campus are characterized by trees, shrubs, and other habitat that provide suitable nesting opportunities for a variety of common and sensitive bird species, including raptors, protected under the MBTA and CFG Code. Construction

of Master Plan projects requiring the removal of potential nesting habitat could result in direct impacts to active bird nests. Impacts to nesting birds in violation of the MBTA and CFG Code would be considered significant. Avoidance measures consistent with the 2004 Final EIR are proposed to prevent potential inadvertent impacts to nesting birds as a result of Master Plan project construction.

Raptor Foraging

The 2004 Final EIR concluded that impacts to raptor foraging habitat would not be significant as compensation for the adverse impacts occurs within the campus' biological preserve. The grassland and scrub habitat located outside of campus preserve areas and within take authorized areas in the eastern portions of campus provide foraging opportunities for raptors. Take authorized areas are conceptually identified for development of the community field relocation and improvement Master Plan project. Impacts to upland foraging habitat within take authorized areas have already been mitigated by the District through preservation measures on campus. A large amount of high quality foraging habitat is being conserved within the campus preserve areas that provide long-term use for raptors occurring in the area. The northern and southern campus preserve areas provide the highest quality foraging habitat on campus for raptors with potential to occur. No impacts are proposed to these campus preserve areas and raptor foraging functions and values would be conserved under the proposed Master Plan. Due to the abundance of high quality raptor foraging habitat being avoided and conserved on campus, the loss of potential foraging habitat as a result of the community field relocation and improvement Master Plan project would be considered less than significant on a local and regional scale, consistent with the 2004 Final EIR. No additional mitigation is proposed.

6.1.3 Jurisdictional Waters and Wetlands

The 2004 Final EIR concluded that impacts to USACE and CDFW jurisdictional resources could occur should any of the future projects impact any portion of the jurisdictional drainage on the east side of campus. The parking lot expansion and new campus entry project could result in impacts to potential jurisdictional waters and wetlands identified on campus. This includes 0.05 acre of herbaceous wetland, 0.01 acre of southern arroyo willow riparian forest, and 0.01 acre of southern willow scrub potentially subject to the regulatory jurisdiction of the USACE, RWQCB, CDFW, and/or County.

As currently planned, the western portion of the parking lot expansion component is conceptually planned at the location of an unnamed drainage swale that supports herbaceous wetland habitat. Approximately 0.04 acre of herbaceous wetland could be impacted at this location based on conceptual planning and informal delineation of potential jurisdiction. The new campus entry is conceptually planned at the location of another unnamed drainage swale; as currently planned, approximately 0.01 acre of herbaceous wetland would be impacted at this location. Direct hydrological connectivity of surface waters from the unnamed swales to the adjacent unnamed drainage feature in the eastern portions of campus, which is a direct tributary to Sweetwater River, could not be confirmed during the 2013 general biological survey. However, the unnamed swale and its associated habitat could be considered adjacent wetlands with contributory functions and services to the unnamed drainage feature nearby and downstream receiving waters. In addition,

the parking lot expansion clips the outermost edges of two riparian stands, including 0.01 acre of southern arroyo willow riparian forest and 0.01 acre of southern willow scrub. This habitat is associated with the unnamed drainage feature that traverses the eastern portions of campus and would be considered jurisdictional. Last, two pedestrian trails are planned to traverse portions of campus preserve areas, including one trail in the northern portion of campus extending east from the existing campus athletic (practice) field, and another connecting the proposed parking lot expansion with the proposed community field in the eastern portion of campus. These trails could require crossing of the unnamed drainage feature that traverses eastern portions of campus. Impacts to jurisdictional waters and wetlands would be considered significant.

As discussed in the 2004 Final EIR, the District has committed to avoiding sensitive wetland and riparian habitat, including jurisdictional waters and wetlands, where feasible through project design. Impact areas would be restricted to the existing developed land or uplands that lack jurisdictional waters and wetlands. Future trails on campus would be designed within the footprint of existing trails and within areas that lack sensitive biological resources. Future pedestrian trails requiring the crossing of the unnamed drainage feature would be designed and constructed to avoid, and if required, span potential jurisdictional resources through the use of bridge structures. Therefore, direct impacts to jurisdictional waters and wetlands on campus, including temporary or permanent fill or discharge, is not expected to occur upon completion of project-specific design of Master Plan projects. In the event that avoidance is not feasible, measures would be implemented by the District to fully compensate the potential loss of jurisdictional waters and wetlands, in addition to preparing necessary plans and acquiring permits for impacts to jurisdictional habitat.

6.1.4 Wildlife Corridors and Linkages

The 2004 Final EIR concluded that wildlife movement is not likely a major biological function of the campus. Undeveloped land on campus is not likely to facilitate movement of larger mammals due to fragmentation of habitat in the local area and existing disturbances and developments. However, undeveloped land in the north and northwest portions of campus, including habitat contained within MSCP Hardline Preserve, could facilitate local migration and dispersal functions for bird species, including sensitive species such as the coastal California gnatcatcher. Similarly, the unnamed drainage feature and associated riparian corridor that traverse the eastern portions of the campus could facilitate local wildlife movement functions, primarily for bird species navigating the local area from the Sweetwater River to the south of campus to undeveloped habitat blocks to the north.

No impacts are proposed that would adversely affect existing wildlife movement functions on campus. Master Plan project impacts will be restricted to areas internal to the campus that are already developed or on the periphery of campus developments that are constrained and do not function in facilitating wildlife movement. The undeveloped habitat and MSCP Hardline Preserve in the north and northwest portions of campus would be avoided; therefore, the highest quality upland habitat for facilitating wildlife movement on campus will be conserved. The unnamed drainage and associated riparian corridor that traverses the eastern portions of campus are expected to be avoided through project-specific design of Master Plan projects. Future pedestrian trail linkage could occur between the community field and the parking lot; however, any new trails would bridge the riparian habitat and avoid any direct impacts, thereby conserving movement

functions. In the unexpected event that impacts cannot be avoided, they would be extremely limited in size (i.e., 0.01 acre of southern arroyo willow riparian forest and 0.01 acre of southern willow scrub) and would have a less than significant effect on wildlife movement functions. No mitigation is proposed, which is consistent with the 2004 Final EIR.

6.1.5 MSCP Hardline Preserve

The 2004 Final EIR concluded that the Master Plan would not directly impact habitat within the County MSCP Preserve. The Final EIR also found that the campus preserve included approximately 43.6 acres of coastal sage scrub and sage scrub subtypes, resulting in a 3.9-acre deficiency from the 47.5-acre preservation requirement in the HLP. The current Master Plan project impacts will avoid campus preserve areas, including MSCP Hardline Preserve. Any trails designated through Hardline Preserve will follow existing disturbed areas and will not impact any sensitive habitat. In addition, although the District has respected the MSCP preserve boundary set by the HLP, there remains ongoing restoration and management needs in order to meet the 47.5-acre coastal sage scrub requirement. Based on the 2013 surveys, an estimated 3.3 acres of disturbed non-native upland habitat types serve as candidates for ongoing restoration and conversion to coastal sage scrub habitat within the campus preserve areas. The campus preserve currently supports 45.7 acres of sage scrub subtypes; therefore, out of the 3.3 acres of disturbed non-native upland habitat types within the campus preserve areas, at least 1.8 acres must be restored to Diegan coastal sage scrub. The majority of these areas occur within MSCP Hardline Preserve. Active restoration and management of these areas is needed to maintain consistency with the MSCP and compliance with the HLP and associated Habitat Management Plan (SEB 1994).

Last, portions of the MSCP Hardline Preserve that occur north of Rancho San Diego Parkway have been significantly impacted by BMX activities and illegal encroachment. Enforcement and protection efforts by the District in 2013 have resulted in a stop to unauthorized activities and the areas are once again in active restoration by the District as part of their ongoing commitment to fulfill their HLP obligations. However, if proper protective measures are not implemented to notify and prevent illegal trespass onto preserve areas, continued impacts and degradation of habitat within the MSCP Hardline Preserve and other campus preserve areas could occur. These impacts would be considered significant.

As discussed in the 2004 Final EIR, restoration of coastal sage scrub within disturbed non-native upland habitat types is a long-standing commitment that needs to be fulfilled. Protective measures, such as signage and fencing, need to be implemented to prevent illegal trespass and ongoing degradation of habitat within preserve areas.

6.2 INDIRECT IMPACTS

Potential indirect impacts could result from Master Plan project construction and operation, including those pertaining to water quality, fugitive dust, non-native plant species, edge effects, night lighting, and noise, as discussed in detail below.

6.2.1 Water Quality

The 2004 Final EIR concluded that compliance with water quality regulations would reduce potential water quality impacts to biological resources to less than significant. If not properly controlled and treated, storm water and nuisance runoff from construction work areas has the potential to cause erosion and carry pollutants and sediment into wetlands and drainage features on campus, as well as downstream receiving waters within the Sweetwater River. Erosion, pollutants, and sediment could potentially contaminate surface water and adversely affect biological resources, including sensitive habitat and species that depend on the resources. These impacts would be considered significant.

The District is required to comply with existing regulations pertaining to protection of water quality during construction activities, including the federal CWA, Porter-Cologne Water Quality Control Act, and National Pollutant Discharge Elimination System (NPDES) Construction General Permit. These regulations require preparation and implementation of a Storm Water Pollution Prevention Plan (SWPPP) identifying construction Best Management Practices (BMPs) to reduce or eliminate sediment and other pollutants in storm water and non-storm water discharges. As applicable, construction BMPs to be implemented by the District for erosion control could include physical stabilization (e.g., geotextiles, mats, fiber rolls, sprayed on binders, mulch, etc.), vegetation stabilization (e.g., hydroseed, seeded mats, container plantings, temporary irrigation, fiber rolls, etc.), preservation of existing vegetation, and permanent landscaping. Sediment control BMPs could include construction work area perimeter and resource protection (e.g., temporary construction fencing, silt fencing, gravel bag barriers, fiber rolls, etc.), sediment capture (e.g., storm drain inlet protection, de-silting basins, etc.), velocity reduction (e.g., outlet protection, energy dissipater, equalization basins, check dams, etc.), and sediment tracking (corrugated steel panels, wheel washes, dust control, etc.). Materials management BMPs could include management of solid, sanitary, concrete, hazardous, and equipment-related waste; covering stock piles from wind and rain; and, covering and providing secondary containment of storage areas.

The specific type and extent of construction BMPs implemented would be tailored to individual Master Plan projects based on site-specific conditions. Implementation of construction BMPs in compliance with the CWA, Porter-Cologne Water Quality Control Act, and NPDES Construction General Permit would maintain downstream water quality in accordance with RWQCB standards, such that construction of future Master Plan projects would not violate any water quality standards or waste discharge requirements and would not otherwise substantially degrade water quality. Thus, construction impacts associated with water quality degradation and potential impacts to downstream habitat would be less than significant.

During operation, the intensification of existing land uses on campus could result in increased pollutant concentrations in urban runoff which could incrementally degrade water quality and potentially impair the beneficial uses of downstream receiving waters. Future Master Plan projects would be required to comply with the applicable NPDES Permit, which would require new development on campus to minimize impacts on receiving waters by incorporating permanent BMPs in the project design. As applicable, standard permanent BMPs to be implemented by the District during Master Plan project operation could include minimization of impervious footprint

(e.g., pervious concrete, porous asphalt, unit pavers, and granular materials, etc.), conservation of natural areas (maximize tree/shrub canopy interception and water conservation in landscaping, use of natural drainage systems), minimization of directly connected impervious surfaces, protection of slopes and channels, provide storm drain system signage, design outdoor material storage areas to reduce pollution introduction, design trash storage areas to reduce pollution introduction, use efficient irrigation systems and landscape design, and employ integrated pest management principles.

The specific type and extent of permanent BMPs incorporated into project design features would be tailored to individual Master Plan projects based on site-specific conditions. Implementation of permanent BMPs in compliance with the NPDES Permit and applicable regulations would maintain downstream water quality in accordance with RWQCB standards, such that operation of Master Plan projects would not violate any water quality standards or waste discharge requirements and would not otherwise substantially degrade water quality. Thus, operational impacts associated with water quality degradation and potential impacts to downstream habitat would be less than significant, consistent with the 2004 Final EIR.

6.2.2 Fugitive Dust

The 2004 Final EIR concluded that impacts from fugitive dust could be significant; however, implementation of dust control mitigation measures required by the Air Pollution Control District (APCD) would reduce air quality impacts to less than significant. Fugitive dust could disperse from construction work areas and settle onto sensitive habitat during construction. A continual cover of dust could reduce the overall vigor of individual plants by reducing their photosynthetic capabilities and increasing their susceptibility to pests or disease. In turn, this could adversely affect animals dependent on these plants. If not properly controlled, construction activities could result in the inadvertent deposition of dust on plants within avoided habitat, including sensitive habitat within campus preserve areas and wetlands, which would be considered a significant impact.

The District is required to control fugitive dust during construction through the implementation of standard avoidance measures mandated by the APCD, including the application of water on unvegetated, unpaved surfaces during construction. Construction BMPs specific to controlling dust at construction work areas will be implemented as standard construction practices for Master Plan projects. Compliance with existing regulations and implementation of required dust control measures would reduce potential impacts to less than significant, consistent with the 2004 Final EIR.

6.2.3 Non-native Plant Species

The 2004 Final EIR concluded that colonization by non-native plant species in non-impact areas and the resulting degradation of habitat used by native species would be considered a significant impact; however, invasion by non-native weeds into the existing wetlands would be less than significant because these areas already contain a prevalence of weeds and the restoration efforts required for HLP consistency will improve the overall quality of the existing habitat. Non-native plants can colonize disturbed areas and could potentially spread into adjacent native habitat. Many

non-native plants are highly invasive and can displace native vegetation, reducing native species diversity and habitat quality. An abundance of non-native species could also potentially increase flammability and fire frequency, change ground and surface water levels, or adversely affect native wildlife that is dependent on the native plant species. Colonization by non-native plant species in avoidance areas, including campus preserve areas and areas supporting sensitive habitat types, and the resulting degradation of habitat used by native species would be considered a significant impact. The Master Plan mentions invasive plants in multiple sections, including Sustainability Recommendations: Habitat Preservation and Restoration, Analysis: Habitat, Analysis: Storm Water, Recommendations–Site Improvements: Habitat Preservation and Restoration, and Recommendation: Sustainability (District 2013). As described in the Master Plan, the Campus is committed to removal of invasive plant species from the habitat areas, reintroducing native plant material, using appropriate plant species for the climate, use of native species in bioswales, and the development of and adherence to campus-wide planting and irrigation design standards. Because the removal and avoidance of invasive plants is built into the Master Plan, the spread of non-native invasive plant species from Master Plan projects is not expected to have a significant impact on native habitat on campus. As discussed in the 2004 Final EIR, on-going habitat restoration efforts within the Preserve and other native habitat areas of the campus by the District would further ensure that colonization would not become a problem over time.

6.2.4 Human Activity/Edge Effects

The 2004 Final EIR concluded that impacts due to edge effects would be less than significant because the proposed development footprint is largely within the developed campus area or does not protrude into preserve areas. Urbanization and increases in human activity can result in degradation to sensitive habitat by fragmenting the land and forming edges between developed areas and habitat. These edges make it easier for non-native plant species to invade native habitat and for predators to access prey that may have otherwise been protected. For example, when a nest parasite, such as the brown-headed cowbird (*Molothrus ater*), has easy access to other birds' nests, brood parasitism in that area will increase. Illegal dumping of trash also increases in these areas. Introduction of new edge effects along boundaries of campus preserve areas and sensitive habitat would be considered significant.

No Master Plan project development is proposed that would introduce new edge effects in areas on campus where existing effects do not already occur. Proposed development would be internal to the built-out campus or along the periphery of existing developments where an edge effect is already apparent, as shown by the prevalence of non-native invasive species and the presence of homeless encampments. Therefore, potential impacts are expected to be less than significant. To further reduce this and other impacts on campus, minimization measures would be implemented by the District for increased protection of campus preserve areas that abut development, including the installation of barriers and signage, in accordance with the 1994 HLP and its Habitat Management Plan, consistent with the 2004 Final EIR.

6.2.5 Night Lighting

The 2004 Final EIR concluded that unless appropriate measures are taken to prevent release of light into the open space, night lighting could have a significant impact on the biological preserve.

Night lighting exposes wildlife species to an unnatural light regime and may alter their behavior patterns. Night lighting on native habitats can also provide nocturnal predators with an unnatural advantage over their prey. Unless appropriate measures are taken to minimize light spillover and glare into open space areas, night lighting could have a significant impact on sensitive animal species potentially using the habitat.

Construction of Master Plan projects is not expected to occur at night; therefore, no construction-related night time lighting is anticipated. However, stadium/tennis court improvements and the community field relocation and improvement project both include a lighting component and would occur immediately adjacent to campus preserve areas. If not properly designed and shielded, lighting from operation of these projects has the potential to be adverse. Open space areas that occur adjacent to existing developments are already subject to some night time lighting. Lighting occurs from existing surface streets, parking lots, and buildings on campus and from adjacent developments. Master Plan projects are not expected to introduce excessive lighting onto areas that are already subjected to night time lighting from existing developments. Measures would be implemented by the District consistent with the 2004 Final EIR to ensure that any lighting proposed for Master Plan projects is properly shielded and directed downward to reduce spillover and glare onto open space areas.

6.2.6 Noise

The 2004 Final EIR concluded that any construction activity within 500 feet of an active raptor nest (300 feet for a Cooper's hawk nest), or 500 feet of an active coastal California gnatcatcher nest, would be considered significant. Excessive noise can startle wildlife and result in temporary or permanent displacement from habitat. Noise-related impacts on wildlife can be especially adverse in the case of breeding birds, whereby excessive noise can cause the bird to abandon an active nest. Excessive construction and operation noise, if occurring during the breeding season and not properly attenuated, could result in effects to breeding birds, including sensitive animal species. These impacts could be considered significant.

Operation of Master Plan projects is not expected to introduce new or excessive noise-generating elements to the local area; therefore, no operation-related noise impacts on biological resources are anticipated. Existing noise levels on campus are expected to be relatively high, primarily due to vehicle traffic and regular campus operations. Noise from adjacent developments and vehicle traffic on Jamacha Road and Fury Lane is expected to occur throughout the day and year-round. As such, wildlife using open space areas on campus are already subject to noise disturbance. Construction of Master Plan projects would occur immediately adjacent to habitat that could be used for breeding by several sensitive bird species, including the coastal California gnatcatcher and raptors.

A threshold of 60.0 dBA has been established as a guideline for determining potential noise effects on nesting birds, and most notably, special-status species known to the region such as the coastal California gnatcatcher and least Bell's vireo. Noise exceeding 60.0 dBA has the potential to result in nest abandonment and nest failure. It is possible that the average and maximum noise levels for the existing baseline condition exceed the 60.0 dBA threshold within portions of the campus that occur immediately adjacent to existing developments. As such, birds selecting to nest in these

areas are already subjected to noise effects. These birds would be expected to have a high tolerance to noise given the existing levels. Master Plan project contribution to existing noise levels would not be expected to result in adverse effects to most nesting bird species, above and beyond what is already occurring as the baseline condition. However, previous surveys on campus suggest that gnatcatcher and other sensitive bird species very likely nest within some of the higher quality open space areas that occur in the northern and western portions of campus. Therefore, there is a potential for construction-related noise to have an adverse effect on sensitive birds, potentially resulting in displacement of individuals and nest abandonment. Avoidance measures consistent with the 2004 Final EIR would be implemented by the District to ensure nesting birds, including sensitive bird species, are not adversely affected by construction-related noise.

7.0 PROPOSED MITIGATION MEASURES

7.1 DIRECT IMPACTS

7.1.1 Sensitive Natural Communities

Of the six major projects proposed in the Master Plan, construction of the parking lot expansion could result in direct impacts and the permanent loss of the following sensitive natural communities that are considered significant: 0.05 acre of impacts to herbaceous wetland (Tier I), 0.01 acre of impacts to southern arroyo willow riparian forest (Tier 1), and 0.01 acre of impacts to southern willow scrub (Tier I). Impacts to Tier II and Tier III habitats within the take authorized portion of the College would be considered less than significant and do not require mitigation.

Implementation of Mitigation Measures BIO-1 through BIO-5 below would reduce potential impacts to sensitive natural communities that require mitigation to a less than significant level.

Mitigation Measures BIO-1 and BIO-2 provide language modifications and updates to MM 4.4-1 from the 2004 Final EIR to include corrected wetland acreages and additional detail on mitigation requirements. Mitigation measures BIO-3 through BIO-5- update MM 4.4-6 to include a more detailed description of the required biological monitoring activities. These new measures would replace and supersede the former measures in the 2004 Final EIR.

BIO-1 **Project-Level Avoidance of Sensitive Natural Communities.** During project-level design of the pedestrian trail and parking lot expansion project, the District shall refine facilities siting and development footprints such that temporary and permanent impacts to jurisdictional wetlands and waters are avoided, if feasible. This avoidance measure would specifically apply to potential jurisdictional habitat on campus, including 0.05 acre of herbaceous wetland (Tier I), 0.01 acre of southern arroyo willow riparian forest (Tier I), and 0.01 acre of southern willow scrub (Tier I) that occurs within the conceptual planning footprint for the parking lot expansion and new campus entry project.

a. If impacts to herbaceous wetland (Tier I), southern arroyo willow riparian forest (Tier I), and/or southern willow scrub (Tier I) cannot be avoided through final

design of the pedestrian trail, parking lot expansion and new campus entry projects, Mitigation Measures BIO-2, BIO-8, BIO-9 shall be implemented by the District to ensure appropriate project-level studies are performed, applicable permits are obtained, and the unavoidable loss of habitat is fully compensated.

BIO-2 **Habitat-Based Compensatory Mitigation.** If permanent and temporary impacts to herbaceous wetland (Tier I), southern arroyo willow riparian forest (Tier I), and southern willow scrub (Tier I) cannot be avoided, the District shall mitigate impacts in-kind (i.e., the same type of habitat as that which is impacted), or an alternative type of habitat which provides equivalent or superior mitigation, through implementation of any one or combination of the following measures, as approved and/or amended by the USACE, RWQCB, and/or CDFW in federal and state permits, as applicable:

a. On-site as creation of new habitat within avoided and preserved areas on campus;
b. On-site as restoration of existing habitat within temporary impact areas and/or avoided and preserved areas on campus;
c. On-site as enhancement of existing habitat within avoided and preserved areas on campus;
d. Off-site as purchase of habitat credits from an off-site mitigation bank in the region. ;
e. Off-site as acquisition of land for the purposes of habitat preservation, creation, restoration, and/or enhancement within other properties or approved mitigation programs available at the time of grading; or
f. A combination of the above.

Mitigation for impacts to herbaceous wetland, southern arroyo willow riparian forest, and southern willow scrub (Tier I) shall be mitigated at a ratio of 1:1 (i.e., 1.0 acre of mitigation land for every 1.0 acre of habitat impacted) to 3:1 to ensure there is no-net-loss, if required, through the acquisition of federal and state permits from the USACE, RWQCB, and/or CDFW.

Prior to construction of Master Plan projects requiring on- or off-site creation, restoration, and/or enhancement mitigation, the District shall prepare a habitat mitigation plan for impacts to sensitive natural communities. The habitat mitigation plan shall include, at a minimum, an implementation strategy, appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. If required, mitigation plans prepared for wetland habitat mitigation shall be approved by the USACE, RWQCB, and/or CDFW prior to vegetation clearing, grading, and/or construction activities. If mitigation is achieved through purchase of habitat credits from an off-site mitigation bank in the region, no habitat management plan shall be required.

If mitigation would occur outside of existing campus preserve areas, the District shall record a restrictive covenant, conservation easement, or biological open space

easement over land that is to be used as mitigation, if such an easement does not already exist, designating it as a preserve for biological conservation purposes. Mitigation proposed within the County shall be accompanied with a conservation easement or other mechanism approved by the County, USFWS, USACE, RWQCB, and/or CDFW, as appropriate, as being sufficient to ensure that lands are protected in perpetuity.

The District shall convey the required mitigation area to an appropriate management entity to ensure long-term biological resource management and monitoring is implemented in perpetuity. Under this scenario, the District shall establish a long-term funding mechanism for maintaining the mitigation area in perpetuity and prepare and implement a long-term management and monitoring plan. The long-term management and monitoring plan shall provide management measures to be implemented to sustain the viability of the habitat, and identify timing for implementing the prescribed measures in the plan. The District shall be responsible for maintaining the biological integrity of the mitigation area and shall abide by all management and monitoring measures identified in the plan until such time as the established long-term funding mechanism has generated sufficient revenues to enable a County-approved management entity to assume the long-term maintenance and management responsibilities.

BIO-3 **Orange Construction Fencing.** For the parking lot expansion and community field relocation Master Plan projects that would occur immediately adjacent to habitat potentially suitable for special status species, the District shall retain a qualified biologist to supervise the installation of temporary orange construction fencing, which clearly delineates the edge of the approved limits of grading and clearing, and the edges of environmentally sensitive areas that occur beyond the approved limits. This fencing shall be installed under the direction of a biologist and prior to construction, and maintained for the duration of construction activity. Fencing shall be installed in a manner that does not impact habitats to be avoided.

If work occurs beyond the fenced or demarcated limits of impact, all work shall cease until the problem has been remedied and mitigation identified. Temporary orange fencing shall be removed upon completion of construction of the project. Implementation of this measure shall be verified by the District prior to and concurrent with construction.

BIO-4 **Construction Staging Areas.** The District shall ensure proper designation of construction staging areas for Master Plan projects such that no staging areas are located within campus preserve areas or other sensitive habitat areas. The construction contractor shall receive approval by the District prior to mobilizations and staging of equipment outside of the project boundaries.

BIO-5 **Biological Monitoring during Construction.** For the parking lot expansion and community field relocation Master Plan projects that would occur on or immediately adjacent to sensitive habitat potentially suitable for special-status species, including

the coastal California gnatcatcher, the District shall retain a qualified biologist to perform monitoring of construction activities. At minimum, the biological monitor shall attend pre-construction meetings to inform construction crews of the sensitive resources and associated avoidance and/or minimization requirements; supervise the installation of temporary construction fencing along the approved limits of disturbance; help ensure that all construction activities and staging areas are restricted to the approved disturbance areas; monitor construction activities, as needed, to help ensure that construction does not encroach into biologically sensitive areas beyond the approved limits of disturbance and that indirect impacts are minimized; and, verify that the area outside the established limits of disturbance remains free of trash, parking, or other construction-related activities. The biological monitor shall be responsible for submitting monitoring reports to the District as documentation of compliance with environmental requirements.

7.1.2 Special-Status Species

Construction of the parking lot expansion and opening of new campus entry and community field relocation and improvement Master Plan projects could result in impacts to the coastal California gnatcatcher, including individuals potentially occurring within MSCP Hardline Preserve, if construction were to occur within 500 feet of occupied gnatcatcher habitat during the breeding season. Construction of Master Plan projects could further result in direct impacts to nesting birds, including raptors, protected under the MBTA and CFG Code. These impacts are potentially significant.

Mitigation Measure BIO-6 would require that avoidance measures are implemented during construction to ensure that gnatcatcher individuals are avoided and breeding activities are not adversely affected. Last, Mitigation Measure BIO-7 would ensure that Master Plan project construction does not adversely affect any nesting birds protected under the MBTA and CFG Code, including raptors and special-status bird species, thereby reducing potential impacts to a less than significant level.

Mitigation Measures BIO-6 and BIO-7 provide language modifications and updates to MM 4.4-2 and MM 4.4-3 from the 2004 Final EIR to include more information regarding surveys, monitoring, and other avoidance measures pertaining to coastal California gnatcatchers and nesting birds protected under the MBTA and CFG Code. These new measures would replace and supersede the former measures in the 2004 Final EIR.

BIO-6 **Coastal California Gnatcatcher Avoidance**. If construction of the parking lot expansion and community field relocation and improvement projects would take place during the breeding season for coastal California gnatcatcher (March 1 to August 15), prior to the first pre-construction meeting for grading permit that involves disturbance of native habitat, the District shall verify that the following project requirements regarding the coastal California gnatcatcher are shown on the construction plans:

No clearing, grubbing, grading, or other construction activities shall occur within 500 feet of coastal sage scrub, maritime succulent scrub, or baccharis scrub habitat between March 1 and August 15, the breeding season of the coastal California gnatcatcher, until the following requirements have been met to the satisfaction of the District:

A. A qualified biologist possessing a valid ESA Section 10(a)(1)(A) Recovery Permit shall survey appropriate habitat areas (i.e., Diegan coastal sage scrub, baccharis scrub, maritime succulent scrub) that lie within 500 feet of the project footprint and would be subject to construction noise levels exceeding 60 dB(A) hourly average for the presence of the coastal California gnatcatcher. If no appropriate habitat is present then the surveys will not be required. If appropriate habitat is present, surveys for the coastal California gnatcatcher shall be conducted in accordance with the protocol survey guidelines established by the USFWS within the breeding season prior to the commencement of any construction. If gnatcatchers are present within 500 feet, then the following conditions shall be met by the District:

   Between March 1 and August 15, no clearing, grubbing, or grading of occupied gnatcatcher habitat shall be permitted. Areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; and

   Between March 1 and August 15, no construction activities shall occur within any portion of the site where construction activities would result in noise levels exceeding 60 dB hourly average at the edge of occupied gnatcatcher habitat. An analysis showing that noise generated by construction activities would not exceed 60 dB hourly average at the edge of occupied habitat must be completed by a qualified acoustician (possessing current noise engineer license or registration with monitoring noise level experience with listed animal species) and approved by the District at least two weeks prior to the commencement of construction activities. Prior to the commencement of construction activities during the breeding season, areas restricted from such activities shall be staked or fenced under the supervision of a qualified biologist; or

   i. At least two weeks prior to the commencement of construction activities, under the direction of a qualified acoustician, noise attenuation measures (e.g., berms, walls) shall be implemented to ensure that noise levels resulting from construction activities will not exceed 60 dB hourly average at the edge of habitat occupied by the coastal California gnatcatcher. Concurrent with the commencement of construction activities and the construction of necessary noise attenuation facilities, noise monitoring shall be conducted at the edge of the occupied habitat area to ensure that noise levels do not exceed 60 dB hourly average. If the noise attenuation techniques

implemented are determined to be inadequate by the qualified acoustician or biologist, then the associated construction activities shall cease until such time that adequate noise attenuation is achieved or until the end of the breeding season (August 16).

ii. Construction noise shall continue to be monitored at least twice weekly on varying days, or more frequently depending on the construction activity, to verify that noise levels at the edge of occupied habitat are maintained below 60 dB hourly average or to the ambient noise level if it already exceeds 60 dB hourly average. If not, other measures shall be implemented in consultation with the biologist and the District, County, USFWS, and CDFW, as necessary, to reduce noise levels within occupied habitat to below 60 dB hourly average or to the ambient noise level if it already exceeds 60 dB hourly average. Such measures may include, but are not limited to, limitations on the placement of construction equipment and the simultaneous use of equipment.

B. If coastal California gnatcatchers are not detected within 500 feet of the project footprint during the protocol survey, the qualified biologist shall submit substantial evidence to the District, County, USFWS, and CDFW which demonstrates whether or not mitigation measures are necessary between March 1 and August 15 as follows:

i. If this evidence indicates the potential is high for coastal California gnatcatcher to be present based on historical records or site conditions, then measure B.iii shall be adhered to as specified above.

ii. If this evidence concludes that no impacts to this species are anticipated, no mitigation measures would be necessary.

BIO-7 **Nesting Bird Breeding Season Avoidance**. To avoid impacts to nesting migratory birds and/or raptors, removal of potential nesting habitat within Master Plan project impact areas should occur outside of the general bird breeding season (January 15 to August 31). If removal of habitat must occur during the breeding season, the District shall retain a qualified biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on and within 300 feet of Master Plan project impact areas. The survey area shall be expanded to areas within 500 feet of Master Plan project impact areas where potential nesting habitat occurs for the coastal California gnatcatcher and raptors. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction activities (including removal of vegetation). If nesting birds are detected, a letter report or memorandum shall be prepared by the qualified biologist, as deemed appropriate by the District, to include required avoidance measures to be implemented to ensure that no active nests are impacted. The District shall verify and approve that all measures identified in the report or memorandum are in place prior to and/or during construction.

7.1.3 Jurisdictional Waters and Wetlands

The parking lot expansion and opening of new campus entry could result in impacts to potential jurisdictional waters and wetlands identified on campus, including an estimated 0.04 acre of herbaceous wetland (Tier I), 0.01 acre of southern arroyo willow riparian forest (Tier I), and 0.01 acre of southern willow scrub (Tier I) potentially subject to the regulatory jurisdiction of the USACE, RWQCB, CDFW, and/or County. These impacts are potentially significant.

Implementation of Mitigation Measure BIO-8 below would ensure that the appropriate project-level studies are conducted for future Master Plan projects with potential to impact jurisdictional wetlands. If unavoidable impacts are identified, implementation of Mitigation Measure BIO-9 would require that the District notify the appropriate agencies and obtain the appropriate permits. Further, Mitigation Measure BIO-2 would ensure that loss of jurisdictional waters and wetlands are fully compensated, thereby reducing impacts to a less than significant level.

Mitigation Measures BIO-8 and BIO-9 provide further clarification and detail to MM 4.4-1 from the 2004 Final EIR to include more information regarding surveys and the permitting process. These new measures, combined with measures BIO-1 and BIO-2 above, would replace and supersede the former measure in the 2004 Final EIR.

BIO-8 **Project-Level Wetland Delineation Studies.** If impacts to herbaceous wetland (Tier I), southern arroyo willow riparian forest (Tier I), and/or southern willow scrub (Tier I) cannot be avoided through final design of the trail connection to the Community Field, parking lot expansion and opening of new campus entry Master Plan projects, the District shall retain a qualified biologist to perform a formal wetland delineation in order to qualify and quantify existing wetland resources potentially subject to the regulatory jurisdiction of the USACE, RWQCB, and/or CDFW. Wetland delineations shall be conducted in accordance with the methodologies and current regulatory guidance recommended by these agencies. The results of the wetland delineation shall be documented in a report to determine project impacts and avoidance, and if required, facilitate the acquisition of federal and state permits.

BIO-9 **Wetland Permits.** Prior to construction of future Master Plan projects (i.e., trail connection to the Community Field, parking lot expansion, and/or opening of new campus entry) that are confirmed to result in potential impacts to jurisdictional wetlands, as identified through implementation of mitigation measure BIO-8 above, the District shall obtain the required federal and state permits from the USACE, RWQCB, and/or CDFW, as specified below:

i. An application for a Nationwide or Individual Permit, depending upon the extent of impacts, shall be submitted by the project applicant to the USACE pursuant to Section 404 of the CWA. If required, the project applicant shall obtain a Nationwide or Individual Permit from the USACE for all impacts, temporary and/or permanent, to any areas within the proposed project which

are determined to qualify as waters of the U.S. subject to USACE jurisdiction.

ii. For any future Master Plan project requiring a federal license or permit to construct or operate, which may result in any discharge into waters of the U.S., the District shall submit to the RWQCB a request for Water Quality Standards Certification pursuant to Section 401 of the CWA to confirm that the discharge would comply with applicable water quality and discharge provisions.

iii. A Notification of Lake or Streambed Alteration shall be submitted by the District to the CDFW pursuant to California Fish and Game Code Section 1602. If required, a Streambed Alteration Agreement shall be obtained from the CDFW for all impacts, temporary and/or permanent, to any areas within the project which are determined to qualify as streambed and/or riparian subject to CDFW jurisdiction.

The District shall mitigate the loss of jurisdictional wetlands through the implementation of the habitat-based compensatory mitigation proposed within Mitigation Measure BIO-2 above, unless otherwise conditioned by the USACE, RWQCB, and CDFW in federal and state permits.

7.1.4 MSCP Hardline Preserve

The deterioration of habitat quality in the more accessible northern portions of campus preserve areas, including MSCP Hardline Preserve, in addition to degradation of previous restoration areas has undermined the functions and values of the preserved habitat. These issues could represent a significant impact and conflict with the County MSCP Subarea Plan and the District's HLP.

As discussed above, the District is required to provide ongoing management of campus preserve areas pursuant to their HLP and associated Habitat Management Plan (SEB 1994). Recent enforcement and protection efforts by the District in 2013 have resulted in a stop to off-road bicycle activities and encroachment in these areas. Further, the areas are in active restoration by the District as part of their ongoing commitment to fulfill their HLP obligations. The District, College biology faculty members, and the District's biological consultant are currently implementing community outreach, notification, signage, and restoration measures in these areas. The District recently met with the community and notified them that the encroachment is not permitted. Signage has been installed and plans have been prepared to remove the mounds of dirt comprising the BMX course and restore the area back to native habitat. Implementation of the restoration measures are underway and will be followed by active management, including maintenance, monitoring, and reporting to ensure success of the restoration efforts.

Implementation of Mitigation Measures BIO-1 through BIO-7, BIO-10 and BIO-11 would ensure that MSCP consistency is maintained and the District remains in full compliance with the HLP, thereby resolving any potential conflicts and reducing potential impacts to a less than significant level.

Mitigation Measure BIO-10 provides updated acreage and clarification to MM 4.4-4. MM 4.4-5, MM 4.4-7 from the 2004 Final EIR. This new measure would replace and supersede the former measures in the 2004 Final EIR.

BIO-10 Habitat Restoration and Enhancement. The District will implement active Diegan coastal sage scrub restoration within campus preserve areas, which will specifically target, at a minimum, a total of 1.8 acres of disturbed non-native upland habitat types located in the northern portion of campus preserve areas and MSCP Hardline Preserve. The District will retain a qualified biologist or restoration specialist to prepare a habitat restoration plan, which will include, at a minimum, an implementation strategy, appropriate seed mixtures and planting method; irrigation; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The District will retain a qualified landscape contractor with demonstrated native habitat restoration experience to perform installation and maintenance of restored habitat, and a qualified biologist or restoration specialist to implement restoration monitoring and reporting requirements until performance and success criteria are met. The District will also treat and/or remove non-native invasive and exotic plant species from campus preserve areas, which will specifically target, at a minimum, giant reed and other highly invasive non-natives within the unnamed drainage feature that traverses the eastern portions of campus.

Permanent signage and fencing will be installed, at a minimum, at the perimeter of campus preserve areas that abut Fury Lane. Signage will also be installed at the perimeter of campus preserve areas that abut existing and proposed campus developments.

In addition, in fulfilling their ongoing management responsibilities, the District is committed to the following area-specific management directives within the campus preserve areas, which are consistent with the Habitat Management Plan:

Habitat Management–To ensure long-term biological resource management and monitoring is implemented in perpetuity, the District or a qualified designee will provide active management to sustain the viability of the habitat and implement this and other prescribed measures from the District's HLP and associated Habitat Management Plan. The District will be responsible for maintaining the biological integrity of the mitigation area and will abide by all management and monitoring measures.

7.2 INDIRECT IMPACTS

7.2.1 Night Lighting

Operation of Master Plan projects could require night lighting for planned uses and campus safety. Master Plan projects sited adjacent to open space areas that could require night lighting elements include the parking lot expansion and opening of new campus entry, community field relocation and improvement projects, and tennis court/stadium improvements. If not properly designed and shielded, night lighting on adjacent open space areas may result in altered behavioral patterns of

wildlife species, including special-status species such as the coastal California gnatcatcher, in addition to a potential reduction in native species diversity in the local area. These impacts would be potentially significant.

Implementation of Mitigation Measure BIO-11 would require that Master Plan project lighting elements planned adjacent to MSCP Hardline Preserve and campus preserve areas are properly designed and shielded to minimize potential night lighting effects, thereby reducing potential impacts to a less than significant level.

Mitigation Measure BIO-11 provides language modifications and updates to MM 4.4-8 from the 2004 Final EIR. This new measure would replace and supersede the former measure in the prior Final EIR.

BIO-11 **Night Lighting.** The District shall require that lighting for future projects sited adjacent to MSCP Hardline Preserve and campus preserve areas is of low illumination, shielded, and directed downwards and away from adjacent native habitat areas.

7.2.2 Noise

Construction-related noise could adversely affect breeding activities of the coastal California gnatcatcher and other bird species that have the potential to nest within 500 feet of the community field relocation and improvements and parking lot expansion Master Plan project impact areas. These impacts are potentially significant. Operation noise from future Master Plan projects would be negligible in comparison to existing ambient noise levels generated by regular campus operations, vehicle traffic, and adjacent developments.

Implementation of Mitigation Measures BIO-5 and BIO-6 would ensure that construction-related noise is minimized such that construction would not adversely affect gnatcatcher breeding activities and other nesting birds, thereby reducing potential impacts to a less than significant level.

8.0 CERTIFICATION/QUALIFICATION

The following individuals contributed to the fieldwork and/or preparation of this report.

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Appendix A

PLANT SPECIES OBSERVED

Appendix A
PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT‡
DICOTS			
Adoxaceae	*Sambucus nigra* ssp. *canadensis*	black elderberry	BS-S,DCSS,DCSS-D
Anacardiaceae	*Malosma laurina*	laurel sumac	BS-S,DCSS,DCSS-D,MSS
	*Schinus molle**	Peruvian pepper tree	BS,DCSS-D, HW-D,NNV, SAWRF,SWS,SWS-D
	*Schinus terebinthifolius**	Brazilian pepper tree	NNV
Apiaceae	*Apium graveolens**	celery	FWM,HW-D,MFS, NNG, SWS-D, SWS
	*Conium maculatum**	poison hemlock	FWM
	*Foeniculum vulgare**	fennel	NNG
Asteraceae	*Achillea millefolium*	Pacific yarrow	DCSS
	Ambrosia psilostachya	western ragweed	BS,FWM,HW-D,MFS,NNG
	Artemisia californica	California sagebrush	DCSS,DCSS-D,MSS,NNG
	Artemisia douglasiana	mugwort	MFS,SAWRF,SCWRF, SWS
	Artemisia dracunculus	tarragon	FWM
	Baccharis pilularis	coyote brush	BS,NNG
	Baccharis salicifolia	mule fat	FWM,HW-D,MFS,MSS,SAWRF,SRF,SWS, TS
	Baccharis sarothroides	broom baccharis	BS,BS-S,DCSS,DCSS-D,MFS
	Bahiopsis laciniata†	San Diego sunflower	DCSS,MSS
	*Carduus pycnocephalus**	Italian thistle	NNG
	*Centaurea melitensis**	star thistle	BS,NNG,NNG-BL
	Corethrogyne filaginifolia	California-aster	NNG
	*Encelia bonariensis**	flax-leaved fleabane	DH, FWM,NNG
	Encelia californica	California encelia	DCSS,NNG
	Ericameria palmeri var. *palmeri*†	Palmer's goldenbush	DCSS
	Erigeron canadensis	horseweed	HW-D,MFS,NNG,NNG-BL
	*Glebionis coronaria**	garland daisy	NNG,NNG-BL
	Gutierrezia californica	California matchweed	BS
	Gutierrezia sarothrae	San Joaquin matchweed	DCSS,BS-S
	*Helminthotheca echioides**	bristly ox-tongue	FWM,HW-D,MFS,SWS

Appendix A (cont.)
PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT‡
DICOTS (cont.)			
Asteraceae (cont.)	*Heterotheca grandiflora*	telegraph weed	DCSS,BS-S,DH,NNG
	Isocoma menziesii	goldenbush	BS,BS-S,DCSS,DCSS-D, DH,NNG,TS
	Iva hayesiana†	San Diego marsh-elder	DCSS
	*Lactuca serriola**	wild lettuce	DH
	Lessingia glandulifera	San Diego sand aster	DH
	*Logfia gallica**	narrow-leaf filago	DH
	Logfia filaginoides	California filago	DH
	*Sonchus oleraceus**	common sow-thistle	FWM
	Stephanomeria virgata	virgate wreath plant	DCSS
	Stylocline gnaphaloides	everlasting nest straw	DCSS
	Xanthium strumarium	cocklebur	FWM,HW-D,TS
Boraginaceae	*Amsinckia intermedia* var. *intermedia*	rancher's fiddleneck	DCSS
	Cryptantha sp.	cryptantha	DCSS,NNG
	Phacelia sp.	phacelia	DCSS,MSS
Brassicaceae	*Brassica nigra**	black mustard	DH,NNG
	*Hirschfeldia incana**	perennial mustard	DCSS-D,NNG,NNG-BL,SWS-D
	*Lobularia maritima**	sweet alyssum	NNV
	Nasturtium officinale	water cress	FWM,SWS
	*Raphanus sativus**	wild radish	DH
Cactaceae	*Cylindropuntia prolifera*	coastal cholla	DCSS,DCSS-D,MSS
	Opuntia littoralis	coastal prickly pear	DCSS,DCSS-D,MSS
Chenopodiaceae	*Chenopodium album**	pigweed	BS-S
	*Dysphania ambrosioides**	Mexican tea	HW-D
	*Salsola tragus**	Russian thistle	DH
Cistaceae	*Cistus* sp.*	ornamental rock rose	BS
Cucurbitaceae	*Cucurbita foetidissima*	calabazilla	NNG
	Marah macrocarpa	wild cucumber	DCSS
Cyperaceae	*Cyperus eragrostis*	tall flatsedge	HW-D
Euphorbiaceae	*Chamaesyce maculata**	spotted spurge	DH
	Croton setigerus	dove weed	NNG
	*Ricinus communis**	castor-bean	FWM,HW-D,SWS-D

Appendix A (cont.)
PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT‡
DICOTS (cont.)			
Fabaceae	*Acacia redolens**	prostrate acacia	BS,DH,NNG,NNV
	Acmispon americanus	Spanish clover	NNG
	Acmispon glaber	deerweed	DCSS
	*Bauhinia variegata**	orchid tree	NNV
	*Parkinsonia aculeata**	Mexican palo verde	DH
Fagaceae	*Quercus agrifolia* var. *agrifolia*	coast live oak	SRF
Geraniaceae	*Erodium cicutarium**	red-stem filaree	NNG
Lamiaceae	*Marrubium vulgare**	horehound	BS,DCSS-D,DH,NNG
	Salvia apiana	white sage	BS,DCSS,DCSS-D,DH,MSS
	Salvia mellifera	black sage	BS,DCSS,DCSS-D
	Trichostema lanceolatum	vinegar weed	DH,NNG
Moraceae	*Ficus* sp.*	fig	NNV
Myrtaceae	*Eucalyptus* sp.*	eucalyptus	BS-S,DCSS-D,EW,NNV
Oleaceae	*Olea europaea**	olive	NNV
Onagraceae	*Epilobium ciliatum* ssp. *ciliatum*	willow herb	HW-D
	Oenothera elata ssp. *hirsutissima*	great marsh evening primrose	DH
Phrymaceae	*Mimulus aurantiacus*	bush monkey-flower	DCSS
Platanaceae	*Platanus racemosa*	western sycamore	SRF
Polemoniaceae	*Navarretia hamata*	skunkweed	DCSS,DH,NNG
Polygonaceae	*Eriogonum fasciculatum*	California buckwheat	BS,DCSS,DCSS-D,DH,NNG
	*Rumex crispus**	curly dock	DH,HW-D
Primulaceae	*Anagallis arvensis**	scarlet pimpernel	DH
Rhamnaceae	*Rhamnus crocea*	spiny redberry	DCSS
Rosaceae	*Heteromeles arbutifolia*	toyon	DCSS
Salicaceae	*Populus fremontii* ssp. *fremontii*	Fremont cottonwood	SCWRF,SRF
	Salix gooddingii	Goodding's black willow	SAWRF
	Salix laevigata	red willow	SAWRF
	Salix lasiolepis	arroyo willow	SAWRF,SCWRF,SRF,SWS-D, SWS
Sapindaceae	*Cupaniopsis anacardioides**	carrotwood	SWS-D

Appendix A (cont.)
PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT‡
DICOTS (cont.)			
Sapindaceae (cont.)	*Dodonaea* sp.*	hopseed bush	DH
	*Koelreuteria bipinnata**	goldenrain tree	NNV
Scrophulariaceae	*Myoporum* sp.*	myoporum	DH
Simaroubaceae	*Ailanthus altissima**	tree of heaven	DH
Solanaceae	*Datura wrightii*	jimson weed	BS,BS-S,NNG
	*Nicotiana glauca**	tree tobacco	BS,BS-S,NNG
	*Solanum elaeagnifolium**	white horse-nettle	NNG
Tamaricaceae	*Tamarix* sp.*	tamarisk	BS,BS-S,HW-D,SAWRF,SWS,SWS-D,TS
Urticaceae	*Urtica dioica* ssp. *holosericea*	stinging nettle	FWM,NNG,SWS-D
Ulmaceae	*Ulmus* sp.*	elm	NNV
Viscaceae	*Phoradendron* sp.*	mistletoe	SAWRF
Vitaceae	*Vitis girdiana*	desert wild grape	SAWRF,SWS-D
MONOCOTS			
Agavaceae	*Hesperoyucca whipplei*	Our Lord's candle	DCSS,DCSS-D
Arecaceae	*Washingtonia robusta**	Mexican fan palm	BS,NNG,SRF,SWS-D
Cyperaceae	*Cyperus eragrostis*	tall flatsedge	HW-D
	*Cyperus involucratus**	umbrella plant	HW-D
Poaceae	*Arundo donax**	giant reed	ADR,SRF,SWS-D
	*Avena fatua**	wild oat	BS,DCSS,DH,NNG
	*Bromus diandrus**	common ripgut grass	BS,NNG,NNG-BL
	*Bromus madritensis**	foxtail chess	BS,NNG,NNG-BL,TS
	*Cortaderia jubata**	pampas grass	TS
	*Cynodon dactylon**	Bermuda grass	NNG
	*Festuca myuros**	fescue	DCSS
	Muhlenbergia rigens	deergrass	HW-D
	*Pennisetum setaceum**	fountain grass	NNV
	*Polypogon monspeliensis**	beardgrass	HW-D,TS
	*Stipa miliacea**	smilo grass	MFS
	*Paspalum dilatatum**	dallis grass	HW-D
Typhaceae	*Typha latifolia*	broad-leaved cattail	FWM,HW-D,SAWRF,SWS

Appendix A (cont.)
PLANT SPECIES OBSERVED

FAMILY	SCIENTIFIC NAME	COMMON NAME	HABITAT‡
GYMNOSPERMS			
Cupressaceae	*Cupressus sempervirens**	Italian cypress	NNV

†Sensitive species
*Non-native species
‡Habitats: ADR=Arundo-dominated riparian; BS=Baccharis scrub; BS-S=Baccharis scrub, sparse phase; DCSS=Diegan coastal sage scrub; DCSS-D=Diegan coastal sage scrub, disturbed phase; DH=Disturbed habitat; EW=Eucalyptus woodland; FWM=Freshwater marsh; HW-D=Herbaceous wetland, disturbed phase; MFS=Mulefat scrub; MSS=Maritime succulent scrub; NNG=Non-native grassland; NNG-BL=Non-native grassland, broadleaf dominated; NNV=Non-native vegetation; SAWRF=Southern arroyo willow riparian forest; SCWRF=Southern cottonwood-willow riparian forest; SRF=Southern riparian forest; SWS=Southern willow scrub; SWS-D=Southern willow scrub, disturbed phase; TS=Tamarisk scrub

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Appendix B

ANIMAL SPECIES OBSERVED OR DETECTED

Appendix B
ANIMAL SPECIES OBSERVED OR DETECTED

ORDER/FAMILY	SCIENTIFIC NAME	COMMON NAME
INVERTEBRATES		
Crustaceans		
Order Decapoda		
Cambaridae	*Orconectes rustica*	rusty crayfish
Insects		
Order Lepidoptera		
Lycaenidae	*Plebejus acmon*	acmon blue
	Leptotes marina	marine blue
	Brephidium exile	pygmy blue
Nymphalidae	*Danaus gillipus*	queen
	Danaus plexippus	monarch
	Vanessa cardui	painted lady
Pieridae	*Pontia protodice*	common white
Riodinidae	*Apodemia mormo virgulti*	Behr's metalmark
VERTEBRATES		
Reptiles		
Order Squamata		
Phrynosomatidae	*Uta stansburiana*	side-blotched lizard
Teiidae	*Cnemidophorus tigris multiscutatus*†	coastal western whiptail
	Cnemidophorus hyperthyrus beldingi†	orange-throat whiptail
Birds		
Order Apodiformes		
Trochilidae	*Calypte anna*	Anna's hummingbird
Order Chardriiformes		
Charadriidae	*Charadrius vociferus*	killdeer
Order Columbiformes		
Columbidae	*Zenaida macroura*	mourning dove
Order Falconiformes		
Accipitridae	*Buteo jamaicensis*	red-tailed hawk
	Buteo lineatus	red-shouldered hawk
Order Passeriformes		
Aegithalidae	*Psaltriparus minimus*	bushtit
Cardinalidae	*Pheucticus melacephalus*	black-headed grosbeak
Corvidae	*Aphelocoma californica*	western scrub-jay
	Corvus brachyrhynchos	American crow
	Corvus corax	common raven

Appendix B (cont.)
ANIMAL SPECIES OBSERVED OR DETECTED

ORDER/FAMILY	SCIENTIFIC NAME	COMMON NAME
VERTEBRATES (cont.)		
Birds (cont.)		
Order Passeriformes (cont.)		
Fringillidae	*Carduelis psaltria*	lesser goldfinch
	Carpodacus mexicanus	house finch
Hirundinidae	*Petrochelidon pyrrhonata*	cliff swallow
Mimidae	*Mimus polyglottos*	northern mockingbird
Parulidae	*Dendroica coronata*	yellow-rumped warbler
	Dendroica petechia	yellow warbler
Passerellidae	*Aimophila ruficeps canescens*†	rufous-crowned sparrow
	Melozone crissalis	California towhee
	Pipilo maculatus	spotted towhee
	Zonotrichia leucophrys	white-crowned sparrow
Picidae	*Colaptes auratus*	northern flicker
	Picoides nuttallii	Nuttall's woodpecker
Sturnidae	*Sturnus vulgaris*	European starling
Sylviidae	*Polioptila californica californica*†	coastal California gnatcatcher
Timaliidae	*Chamaea fasciata*	wrentit
Troglodytidae	*Thyromanes bewickii*	Bewick's wren
Tyrannidae	*Sayornis nigricans*	black phoebe
	Sayornis saya	Say's phoebe
	Tyrannus vociferans	Cassin's kingbird
Mammals		
Order Carnivora		
Canidae	*Canis latrans*	coyote
Felidae	*Felis cattus*	house cat
	Lynx rufus	bobcat
Procyonidae	*Procyon lotor*	raccoon
Order Didelphimorphia		
Didelphidae	*Didelphis virginiana*	Virginia opossum
Order Lagomorpha		
Lepidae	*Lepus californicus bennettii*	black-tailed jackrabbit
	Sylvilagus audubonii	desert cottontail
Order Rodentia		
Muridae	*Neotoma* sp.	woodrat
	Peromyscus sp.	deermouse
Sciuridae	*Spermophilus beecheyi*	California groundsquirrel

†Sensitive species

Appendix C

LISTED OR SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

Appendix C
LISTED OR SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
San Diego thornmint (*Acanthomintha ilicifolia*)	FT/SE CNPS List 1B MSCP Covered MSCP Narrow Endemic County List A	Low. Occurs on clay lenses in open areas. No suitable habitat occurs on campus.
San Diego ambrosia (*Ambrosia pumila*)	FE/-- CNPS List 1B MSCP Covered County List A	Low. This low-growing perennial herb is primarily found in open habitats such as native grasslands within floodplains. No suitable habitat occurs on campus.
Palmer's sagewort (*Artemisia palmeri*)	--/-- CNPS List 2 MSCP Non-Covered County List B	Low. Could occur in coastal sage scrub and in drainages on campus. Would have been observed if present.
San Diego barrel cactus (*Ferocactus viridescens*)	--/-- CNPS List 2 MSCP Covered County List B	Low. Occurs on dry slopes in coastal sage scrub. Would have been observed if present.
Graceful tarplant (*Holocarpha virgata* ssp. *elongata*)	--/-- CNPS List 4.2 MSCP Non-Covered County List D	Moderate. Occurs in coastal sage scrub, cismontane woodland, and valley and foothill grasslands. Would have been observed during surveys if present.
Decumbent goldenbush (*Isocoma menziesii* var. *decumbens*)	--/-- CNPS List 1B MSCP Non-Covered County List A	Low. Could occur in coastal sage scrub but is more partial to clay soils (Reiser 2001) that do not occur on campus.
San Diego goldenstar (*Muilla clevelandii*)	--/-- CNPS List 1B MSCP Covered County List A	Low. Occurs on clay soils on dry mesas and hillsides in coastal sage scrub or chaparral. No suitable habitat occurs on campus.
Ashy spike-moss (*Selaginella cinerascens*)	--/-- CNPS List 4.2 MSCP Non-Covered County List D	Moderate to high. Occurs on mesas in coastal sage scrub and chaparral. Would have been observed if present.

*A listing and explanation of status and sensitivity codes can be found in Appendix E.

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Appendix D

LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

Appendix D
LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
	INVERTEBRATES	
Quino checkerspot butterfly (*Euphydyras editha quino*)	FE/-- MSCP Non-Covered County Group 1	Very Low. Occurs in vegetation communities with relatively open areas that typically include patches of dwarf plantain (*Plantago erecta*), nectaring plants, and/or purple owl's clover (*Castilleja exserta*). These habitats include non-native grassland, disturbed habitat and open areas within shrub communities. The campus is located outside the required survey area identified by the USFWS.
Hermes copper butterfly (*Lycaena hermes*)	--/-- MSCP Non-Covered County Group 1	Low. Host plant spiny redberry occurs on campus. No populations of this species are known to occur in the vicinity. Site likely occurs outside of species range.
	VERTEBRATES	
Amphibians		
Arroyo southwestern toad (*Bufo microscaphus californicus*)	FE/CSC MSCP Covered MSCP Narrow Endemic	Very Low. Found in shallow pools and open sand and gravel flood terraces of medium- to large-sized intermittent or perennial streams that are flooded on a fairly regular basis (USFWS 1999). No suitable habitat occurs on campus. The unnamed drainage that traverses the eastern portions of campus are narrowly incised, primarily vegetated, and do not support suitable substrate or hydrology to support this species.

Appendix D (cont.)
LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Amphibians (cont.)		
California red-legged frog (*Rana aurora draytonii*)	FT/CSC MSCP Covered MSCP Narrow Endemic	Very Low. Generally found in ponds in humid forests, woodland, grasslands and stream-sides, especially where cattails or other plants provide good cover. Frequents marshes, streams, lakes, reservoirs, ponds and other generally permanent water sources. Considered extirpated from San Diego County.
Reptiles		
San Diego banded gecko (*Coleonyx variegatus abbottii*)	--/-- MSCP Non-Covered County Group 1	Low. Prefers coastal sage scrub with rock outcrops and boulders. Limited habitat occurs on campus.
Red-diamond rattlesnake (*Crotalus ruber ruber*)	--/CSC MSCP Non-Covered County Group 2	High near rocky outcrops in coastal sage scrub, chaparral, creosote bush scrub and areas dominated by cactus.
San Diego ringneck snake (*Diadophis punctatus similis*)	--/-- MSCP Non-Covered County Group 2	Moderate in canyon bottoms or grassland and coastal sage scrub on campus.
Coronado skink (*Eumeces skiltonianus interparietalis*)	--/CSC MSCP Non-Covered County Group 2	Moderate in grasslands and coastal sage scrub where there is abundant leaf litter or low, herbaceous growth.
San Diego horned lizard (*Phrynosoma coronatum blainvillei*)	--/CSC MSCP Covered County Group 2	High in coastal sage in preserve area. Harvester ants (*Pogonomyrmex* sp.), a primary prey item, were observed on campus.
Coastal rosy boa (*Lichanura trivirgata roseofusca*)	--/-- MSCP Non-Covered County Group 2	Low to moderate near rocky areas in coastal sage scrub on campus.

Appendix D (cont.)
LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Reptiles (cont.)		
Western patch-nosed snake (*Salvadora hexalepis virgultea*)	--/CSC MSCP Non-Covered County Group 2	Moderate in shrub habitats on campus.
Birds		
Cooper's hawk (*Accipiter cooperii*)	--/CSC MSCP Covered County Group 1	High in riparian areas near suitable foraging areas such as scrublands or fields.
Sharp-shinned hawk (*Accipiter striatus*)	Nesting; --/CSC MSCP Non-Covered County Group 1	Low. Occupies edges of deciduous or coniferous woodlands and thickets. May migrate during the winter to other areas that provide adequate cover.
Grasshopper sparrow (*Ammodramus savannarum*)	--/-- MSCP Non-Covered County Group 1	Moderate in disturbed coastal sage scrub habitat that has a mix of grasses and coastal sage scrub species.
Bell's sage sparrow (*Amphispiza belli belli*)	--/CSC MSCP Non-Covered County Group 1	Moderate to high in coastal sage scrub.
Burrowing owl (*Athene cunicularia*)	--/CSC MSCP Covered MSCP Narrow Endemic County Group 1	Low. Prefers grassland, open sage scrub and desert habitats. Little suitable habitat occurs on campus.
Red-shouldered hawk (*Buteo lineatus*)	--/-- MSCP Non-Covered County Group 1	Moderate to high in southern arroyo willow riparian forest on campus, and to nest in tall eucalyptus trees.
Ferruginous hawk (*Buteo regalis*)	Wintering; --/CSC MSCP Covered County Group 1	Low. Uncommon winter visitor to grasslands and agricultural fields.

Appendix D (cont.)
LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Birds (cont.)		
Turkey vulture (*Cathartes aura*)	--/-- MSCP Non-Covered County Group 1	Not likely to nest. Low potential to forage on campus. Nests are made on ledges, rock outcrops, and in tall trees far from development. Forages for carrion.
Northern harrier (*Circus cyaneus*)	Nesting; --/CSC MSCP Covered County Group 1	Low. Prefers grasslands and other open habitats. This species is not likely to nest, but could potentially forage over portions of the campus.
White-tailed kite (*Elanus leucurus*)	--/FP MSCP Non-Covered County Group 1	Moderate. Nesting typically occurs in riparian or oak woodlands adjacent to grasslands where small mammals are hunted. Marginal nesting habitat occurs. This species has not been observed on campus during previous surveys.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	FE/SE MSCP Covered MSCP Narrow Endemic County Group 1	Very low in southern arroyo willow riparian forest on campus. One territory was reported at the east end of the Sweetwater Reservoir, which is considered ephemeral, in 1986 (San Diego Natural History Museum 1995). Unlikely to occur on campus.
California horned lark (*Eremophila alpestris actia*)	--/CSC MSCP Non-Covered County Group 2	Moderate. Utilizes sandy beaches, agricultural fields, grassland, and open areas. Marginal open disturbed habitat occurs within limited portions of campus.
Yellow-breasted chat (*Icteria virens*)	--/CSC MSCP Non-Covered County Group 1	Moderate to high in southern arroyo willow riparian forest on campus.

Appendix D (cont.)
LISTED OR SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

SPECIES	STATUS*	POTENTIAL TO OCCUR
VERTEBRATES (cont.)		
Birds (cont.)		
Loggerhead shrike (*Lanius ludovicianus*)	--/CSC MSCP Non-Covered County Group 1	Low. Utilizes open habitats including grasslands, scrublands and ruderal areas with adequate perching locations.
Western bluebird (*Sialia mexicana*)	--/-- MSCP Non-Covered County Group 2	Not likely to nest. Moderate as a winter visitor on campus.
Common barn owl (*Tyto alba*)	--/-- MSCP Non-Covered County Group 2	Low potential to nest or roost on campus. This species likely forages over the local area.
Least Bell's vireo (*Vireo bellii pusillus*)	FE/SE MSCP Covered MSCP Narrow Endemic County Group 1	Low to moderate in southern arroyo willow riparian forest on campus. This species occurs in the Sweetwater River near the campus. Habitat on campus is limited, poorly developed, fragmented by development, and contains a high percentage of non-native vegetation.
Mammals		
Dulzura pocket mouse (*Chaetodipus californicus femoralis*)	--/CSC MSCP Non-Covered County Group 2	Low along shrubland/grassland edges on campus.
Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*)	--/CSC MSCP Non-Covered County Group 2	Low in open areas of coastal sage scrub and weedy growth on campus.
Greater western mastiff bat (*Eumops perotis californicus*)	--/CSC MSCP Non-Covered County Group 2	Low to forage on campus. Foraging is concentrated around bodies of water but also includes coastal sage scrub, chaparral and grassland habitats.

*See Appendix E for an explanation of status codes

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Appendix E

EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

Appendix E
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

FEDERAL, STATE, AND COUNTY CODES

U.S. Fish and Wildlife Service (USFWS)

FE Federally listed endangered
FT Federally listed threatened
FSC Federal special concern species (a "term of art" for former Category 2 candidates)

California Department of Fish and Game (CDFW)

SE State listed endangered
ST State listed threatened
CSC California special concern species

County of San Diego

Plant sensitivity:

Group A Plants rare, threatened or endangered in California or elsewhere
Group B Plants rare, threatened or endangered in California but more common elsewhere
Group C Plants that may be quite rare, but more information is needed to determine rarity status
Group D Plants of limited distribution and are uncommon, but not presently rare or endangered

Animal sensitivity:

County Sensitive Animals considered under California Environmental Quality Act (CEQA) review of projects.

OTHER ACRONYMS AND EXPLANATIONS

Multiple Species Conservation Program (MSCP) Covered

Multiple Species Conservation covered species for which County and City have take authorization within MSCP area.

Narrow Endemic Species

Some native species, primarily plants with restricted geographic distributions, soil affinities, and/or habitats, are referred to as a narrow endemic species. For vernal pools and identified narrow endemic species, the jurisdictions will specify measures in their respective subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable.

CALIFORNIA NATIVE PLANT SOCIETY (CNPS) CODES

LISTS

1A = Presumed extinct.

1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.

2= Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.

3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.

4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

Appendix F

CALIFORNIA NATIVE SPECIES FIELD SURVEY FORM

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 11/14/2013

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Bahiopsis laciniata*

Common Name: San Diego sunflower, San Diego viguiera

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 500 Subsequent Visit? ☑ yes ☐ no

Is this an existing NDDB occurrence? _____ Yes, Occ. # ☐ no ☑ unk.

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: George Aldridge
Address: 7875 El Cajon Blvd
La Mesa, CA, 91942
E-mail Address: GeorgeA@helixepi.com
Phone: (619) 462-1515

Plant Information

Phenology: 20 % vegetative 0 % flowering 0 % fruiting

Animal Information

_____ # adults _____ # juveniles _____ # larvae _____ # egg masses _____ # unknown

☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

***Location Description* (please attach map *AND/OR* fill out your choice of coordinates, below)**

In the northwestern and western extremes of the Cuyamaca Community College campus

County: San Diego Landowner / Mgr.: Grossmont-Cuyamaca Community College District

Quad Name: Jamul Mountains Elevation: various

T 15S R 1W Sec --, -- ¼ of --¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): _____

T____ R____ Sec ____, ____ ¼ of _____¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____

DATUM: **NAD27** ☐ **NAD83** ☐ **WGS84** ☐ Horizontal Accuracy _____ meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☐

Coordinates:

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*

Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Diegan coastal sage scrub, dominated by Bahiopsis laciniata, Artemisia californica, Salvia mellifera. South- and east-facing slopes; rocky, fine sandy loam soils.

Maritime succulent scrub dominated by Cylindropuntia prolifera, Opuntia littoralis, and Artemisia californica. south-facing slopes; rocky, fine sandy loam soils.

Please fill out separate form for other rare taxa seen at this site. coastal California gnatcatcher

Site Information Overall site/occurrence quality/viability (site + population): ☑ Excellent ☐ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Open space on a community college campus. Surrounding land uses college facilities and undeveloped land.

Visible disturbances: Pedestrian trails.

Threats: none

Comments: These populations were identified in the early 1990's and have been mapped repeatedly during subsequent vegetation surveys on the campus since that time. They appear to be healthy and increasing in size.

Determination: *(check one or more, and fill in blanks)*

☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: personal knowlege of the species

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
1807 13th Street, Suite 202
Sacramento, CA 95811
Fax: (916) 324-0475 email: CNDDB@wildlife.ca.gov

Date of Field Work (mm/dd/yyyy): 11/14/2013

For Office Use Only
Source Code _____ Quad Code _____
Elm Code _____ Occ. No. _____
EO Index No. _____ Map Index No. _____

Reset

California Native Species Field Survey Form

Send Form

Scientific Name: *Polioptila californica californica*

Common Name: coastal California gnatcatcher

Species Found? ☑ Yes ☐ No _____ If not, why?

Total No. Individuals 1 Subsequent Visit? ☑ yes ☐ no

Is this an existing NDDB occurrence? _____ ☐ no ☑ unk.
Yes, Occ. #

Collection? If yes: _____ Number _____ Museum / Herbarium

Reporter: George Aldridge
Address: 7875 El Cajon Blvd
La Mesa, CA, 91942
E-mail Address: GeorgeA@helixepi.com
Phone: (619) 462-1515

Plant Information

Phenology: _____% vegetative _____% flowering _____% fruiting

Animal Information

1	0	0	0	0
# adults	# juveniles	# larvae	# egg masses	# unknown

☑ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ other

Location Description ***(please attach map AND/OR fill out your choice of coordinates, below)***

In the northwestern extremes of the Cuyamaca Community College campus

County: San Diego Landowner / Mgr.: Grossmont-Cuyamaca Community College District
Quad Name: Jamul Mountains Elevation: various
T 15S R 1W Sec --, -- ¼ of --¼, Meridian: H☐ M☐ S☐ Source of Coordinates (GPS, topo. map & type): _____
T___ R___ Sec ___, ___ ¼ of ___¼, Meridian: H☐ M☐ S☐ GPS Make & Model _____
DATUM: **NAD27** ☐ **NAD83** ☐ **WGS84** ☐ Horizontal Accuracy _____ meters/feet
Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☐ ***OR*** Geographic (Latitude & Longitude) ☐
Coordinates: Unsectioned lands; various locations in the northern corner of the college campus.

Habitat Description (plants & animals) *plant communities, dominants, associates, substrates/soils, aspects/slope:*
Animal Behavior *(Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):*

Diegan coastal sage scrub, Artemisia californica, Salvia mellifera, Eriogonum fasciculatum. South- and east-facing slopes; rocky, fine sandy loam soils.

Please fill out separate form for other rare taxa seen at this site. Bahiopsis laciniata

Site Information Overall site/occurrence quality/viability (site + population): ☑ Excellent ☐ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: Open space on a community college campus. Surrounding land uses college facilities and undeveloped land.

Visible disturbances: Pedestrian trails.

Threats: none

Comments: Species was detected on campus in 2001, and 2003 in the same location.

Determination: *(check one or more, and fill in blanks)*
☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☑ Other: personal knowlege of the species

Photographs: *(check one or more)*

	Slide	Print	Digital
Plant / animal	☐	☐	☐
Habitat	☐	☐	☑
Diagnostic feature	☐	☐	☐

May we obtain duplicates at our expense? yes ☐ no ☐